```
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
```

August 2, 2005, 22:37:58; Search time 159 Seconds (without alignments) 1090.412 Million cell updates/sec OM protein - protein search, using sw model Run on:

US-10-801-671-2 Perfect score:

2410 1 MCIPLEASHSVEEDTHPSHY.....QRITLDEALQHPFFDLLKKK 445 Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

Total number of hits satisfying chosen parameters:

1745140 seqs, 389608008 residues

Searched:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database

Published Applications AA:\*

1: \cgn2\_6/ptodata/1/pubpaa/NSO7 PUBCOMB.pep:\*

2: \cgn2\_6/ptodata/1/pubpaa/PCT NEW PUB.pep:\*

3: \cgn2\_6/ptodata/1/pubpaa/NSO6 NEW PUB.pep:\*

4: \cgn2\_6/ptodata/1/pubpaa/NSO7 NEW PUB.pep:\*

5: \cgn2\_6/ptodata/1/pubpaa/NSO7 NEW PUB.pep:\*

6: \cgn2\_6/ptodata/1/pubpaa/NSO7 NEW PUB.pep:\*

7: \cgn2\_6/ptodata/1/pubpaa/NSO8 NEW PUB.pep:\*

8: \cgn2\_6/ptodata/1/pubpaa/NSO8 NEW PUB.pep:\*

9: \cgn2\_6/ptodata/1/pubpaa/NSO8 NEW PUB.pep:\*

10: \cgn2\_6/ptodata/1/pubpaa/NSO8 NEW PUB.pep:\*

11: \cgn2\_6/ptodata/1/pubpaa/NSO8 NEW PUB.pep:\*

12: \cgn2\_6/ptodata/1/pubpaa/NSO8 NEW PUB.pep:\*

12: \cgn2\_6/ptodata/1/pubpaa/NSO8 NEW PUB.pep:\*

13: \cgn2\_6/ptodata/1/pubpaa/NSO8 NEW PUB.pep:\*

14: \cgn2\_6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:\*

15: \cgn2\_6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:\*

16: \cgn2\_6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:\*

17: \cgn2\_6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:\*

18: \cgn2\_6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:\*

19: \cgn2\_6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:\*

10: \cgn2\_6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:\*

11: \cgn2\_6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:\*

12: \cgn2\_6/ptodata/1/pubpaa/USO8 PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

					))	
Result No.	Score	* Query Match	* Query Match Length DB	DB	ID	Description
-	2410	100.0		6	US-09-810-671-2	Sequence 2, Appli
7	2410	100.0	445	13	US-10-109-854-2	Sequence 2, Appli
e	2410	100.0	445	14	US-10-339-656-2	Sequence 2, Appli
4	2410	100.0	•	16	US-10-801-671-2	Sequence 2, Appli
ហ	2315.5	96.1		15	US-10-267-502-352	Sequence 352, App
9	2312	95.9	427	σ	US-09-810-671-4	Sequence 4, Appli
7	2312	95.9		13	US-10-109-854-4	Sequence 4, Appli
80	2312	95.9		14	US-10-339-656-4	Sequence 4, Appli
6	2312	95.9		16	US-10-801-671-4	Sequence 4, Appli
10	2261.5			φ	US-09-905-999-25	Sequence 25, Appl
11	2261.5		481	15	US-10-267-502-355	Sequence 355, App

70 20 20 20 20 20 20 20 20 20 20 20 20 20	Sequence 354, Appl Sequence 354, Appl Sequence 56866, A Sequence 350, Appl Sequence 350, Appl Sequence 349, Appl Sequence 135, Appl Sequence 135, Appl Sequence 135, Appl
16 US-10-825-177-25 US-09-10-671-5 13 US-09-10-671-5 14 US-10-109-854-5 14 US-10-139-656-5 15 US-10-116-275-127 16 US-10-116-275-127 16 US-10-116-275-127 16 US-10-755-889-2 17 US-10-755-889-2 18 US-10-755-889-2 19 US-09-905-999-20 10 US-10-825-114-54366 15 US-10-825-114-54366 15 US-10-64-421-131 16 US-10-102-806-539 17 US-09-905-999-21 16 US-10-102-806-539 18 US-09-905-999-21 19 US-09-905-999-21 10 US-09-905-999-21 10 US-09-905-999-21 10 US-09-905-999-21 11 US-10-102-806-555 12 US-01-102-806-555 13 US-01-102-806-555 14 US-10-102-806-555 15 US-10-102-806-555 17 US-01-102-806-555 18 US-10-102-806-555 18 US-10-102-806-555 19 US-01-102-806-535 19 US-01-102-806-535 19 US-01-102-806-535 19 US-01-102-806-535	100001700
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	490 490 490 484 341 417 511
8 5 7 7 8 8 8 8 8 8 9 9 7 7 7 7 7 7 9 9 9 9	
2261.5 1893 1887 1887 1887 1887 1887 1887 1870 1970 1970 1970 1970 1970 1970 1970 19	1222 1222 1222 1222 1222 1222 1222 122
11111111111111111111111111111111111111	2 6 6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

## ALIGNMENTS

Sequence 2, Application US/09810671
| Publication No. US20020076783A1
| Publication No. US20020076783A1
| GENERAL INFORMATION:
| APPLICANT: YAN, Chunhua et al
| TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
| TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
| TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
| TITLE OF INVENTION: ACID MOLES: CORRENT FILING DATE: 2001-06-08
| CURRENT FILING DATE: 2001-06-08
| NUMBER OF SEQ ID NOS: 5
| SOFTWARE: FastSEQ for Windows Version 4.0
| SEQ ID NO 2
| LENGTH: 445 61 YRIHCSKSSVRSRRSSPKRKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSGDVLR 120 1 MCIPLEASHSVEEDTHPSHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESG 1 MCIPLEASHSVEEDTHPSHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESG 0; Gaps 100.0%; Score 2410; DB 9; Length 445; 100.0%; Pred. No. 2.1e-177; cive 0; Mismatches 0; Indels 0 Matches 445; Conservative Query Match Best Local Similarity ORGANISM: Human US-09-810-671-2 g g ઠે ò

ö

9 9 121 ARYEIVDTLGEGAFGKVVECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDP 180

ò

```
Sequence 2, Application US/10339656;
Sequence 2, Application US/10339656;
Bublication No. US2030134319A1
GENERAL INFORMATION:
APPLICANT: YAN Chunhua et al.
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, AND USES TITLE OF INVENTION: THEREOF TITLE OF INVENTION: THEREOF TITLE OF INVENTION: THEREOF TITLE OF INVENTION: THEREOF TITLE OF INVENTION: UNMER: US/10/339,656
CURRENT APPLICATION NUMBER: 10/109,854
PRIOR PLILING DATE: 2001-01-10
PRIOR PLILING DATE: 2001-03-19
PRIOR PLING DATE: 2001-03-19
PRIOR PLILING DATE: 2001-03-19
PRIOR PLING DATE: 2001-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NSVERCVOMIEWFDHHGHVCIVFELLGLSTYDFIKENSFLPFGIDHIRGMAYQICGSINF 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LHHNKLTHTDLKPENILFVKSDYVVKYNSKAKRDERTLKNTDIKVVDFGSATYDDEHHST 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 YRIHCSKSSYRSRRSSPKRKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSGDVLR 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LVSTRHYRAPEVILALGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMWERILGPI 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POHMIOKTRKRKYFHHNOLDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLVRRML
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 LVSTRHYRAPBVILALGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 ARYEIVDTIGEGAFGKVVECIDHGMDGMHVAVKIVKNVGRYRBAARSEIQVLEHLINSTDP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MCIPLEASHSVEEDTHPSHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 445;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 2410; DB 14;
100.0%; Pred. No. 2.1e-177;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EYDPTORITLDEALQHPFFDLLKKK 445
                                                                                                                   EYDPTORITLDEALQHPFFDLLKKK 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match
Best Local Similarity 100.
Matches 445; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
CORGANISM: Homo sapien
US-10-339-656-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                         361
                                                                                                         421
                                              361
                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ОP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                   a
                                                                                                 ò
                  8
                                       ò
                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                          Sequence 2, Application US/10109854
; Sequence 2, Application US/10109854
; Publication No. US2020119548A1
; GENERAL INFORMATION: CHARGE FOR THE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
; TITLE OF INVENTION: THEREOF
; TITLE OF INVENTION: THEREOF
; TITLE OF INVENTION: UNMBER: US/10/109,854
; CURRENT FILING DATE: 2002-04-01
; PRIOR FILING DATE: 2000-082-4
; PRIOR PLICATION NUMBER: 09/4810,671
; PRIOR FILING DATE: 2001-03-19
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: FeatSEQ for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NSVERCVOMLEWFDHHGHVCIVFELLGLSTYDFIKENSFLPFQIDHIROMAYQICQSINF 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 YRIHCSKSSVRSRRKSSPKRKRNRHCSSHQSRSKSHRKRKRSRSIEDDEEGHLICQSGDVLR 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                     POHMIOKTRKRKYFHHNOLDWDEHSSAGRYVRRRCKPLKEFMLCHDEBHEKLFDLVRRML 420
                                                                                                                                                                       LVSTRHYRAPEVILALGWSOPCDVWSIGCILIEYYLGFTVPQTHDSKEHLAMMERILGFI 360
                                                                                                                                                                                         240
                                                                                                              300
                                                                                                                              ARYEIVDTLGEGAFGKVVECIDHGMDGMHVAVKIVKQVGRYREAARSEIQVLEHLNSTDP 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 YRIHCSKSSVRSRRSSPKRKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSGDVLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MCIPLEASHSVEEDTHPSHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ARYETYDTLGEGARGKVVECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                     LHHNKLTHTDLKPENI LFVKSDYVVKYNSKMKRDERTLKNTDI KVVDFGSATYDDEHHST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 2410; DB 13; Length 445; Best Local Similarity 100.0%; Pred. No. 2.1e-177; Matches 445; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                      EYDPTQRITLDEALQHPFFDLLKKK 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: PRT
; ORGANISM: Homo sapien
US-10-109-854-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                         241
                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                    301
                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                            421
                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                           8 6 8 6
                                                                                                                                                                              중 염
                                                         8 8 8
                                                                                                                                                   엄
                                  윱
```

ö

Gaps

9

420 420

360 360

240

```
TYPE: PRT CRGANISM: Homo US-10-267-502-352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             427;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-810-671-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-810-671-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S:
Matches 427;
                                                                                                                                                                                                                                                                                             153
                                                                                                                                                                                                                                                                                                                         177
                                                                                                                                                                                                                                                                                                                                                     213
                                                                                                                                                                                                                                                                                                                                                                                237
                                                                                                                                                                                                                                                                                                                                                                                                             273
                                                                                                                                                                                                                                                                                                                                                                                                                                          297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 4
                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                 ઠે
                                                                                                                                                                   셤
                                                                                                                                                                                                      ò
                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 YRIHCSKSSVRSRRSSPKRKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSGDVLR 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ARYEIVDTLGEGAFGKVVECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDP 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LHHNKLTHTDLKPENILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHST 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LHHNKLTHTDLKPENILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHST 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LVSTRHYRAPEVILALGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGPI 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      POHMIOKTRKRKYFHHNOLDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLVRRML 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PQHMIQKTRKRKYFHHNQLDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLVRRML 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                          YRIHCSKSSVRSRRSSPKRKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSGDVLR 120
                                                                                                                                                                                                                                                                                                                                                                                                                1 MCIPLEASHSVEEDTHPSHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESG 60
                                                   APPLICANT: YAN, Chunhua et al.
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND
TITLE OF INVENTION: THEREOF
FILE REFERENCE: CLOOO758DIV-III
CURRENT APPLICATION NUMBER: US/10/801,671
CURRENT FILING DATE: 2004-03-17
PRIOR FILING DATE: 2000-08-24
PRIOR FILING DATE: 2000-08-24
PRIOR FILING DATE: 2000-01-03-19
PRIOR FILING DATE: 2000-03-19
NUMBER OF SEQ ID NOS: 5
SOFTWARE: FABLSEQ for Windows Version 4.0
SSOTTWARE: PABLSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                               MCI PLEASHSVEEDTHPSHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYDI ESG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NSVFRCVQMLEWFDHHGHVCIVFELLGLSTYDF1KENSFLPF01DH1RQMAY01COS1NF
                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                         Length 445;
                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                      100.0%; Score 2410; DB 16;
100.0%; Pred. No. 2.1e-177;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 352, Application US/10267502
Publication No. US20040071700A1
GENERAL INFORMATION:
APPLICANT: Kim, Jaeseob
APPLICANT: Kim, Jaeseob
TITLE OF INVENTION: Obesity Linked Genes
FILE REFERENCE: LSD-07416
CURRENT APPLICATION NUMBER: US/10/267,502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EYDPTQRITLDEALQHPFFDLLKKK 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; Sequence 2, Application US/10801671; Publication No. US20040152123A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.
Matches 445; Conservative
                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-267-502-352
                                                                                                                                                                                                                                                                 LENGTH: 445
US-10-801-671-2
                                                                                                                                                                                                                                                                                                         US-10-801-671-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   원
                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
```

```
Sequence 4, Application US/09810671
Publication No. US20020076783A1
GENERAL INFORMATION:
APPLICANT: YAN, Chunhua et al
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
FILE REFERENCE: CLO00758
CURRENT APPLICATION NUMBER: US/09/810,671
CURRENT PILING DATE: 2001-06-08
NUMBER OF SEQ ID NOS: 5
SOFTWARE: FRASESQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        57 IESGYRIHCSKSSVRSRRSSPKRKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSG 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         117 DVLRARYBIVDTLGEGAFGKVVECIDHGMDGMHVAVKIVKNVGRYREAARSBIQVLEHLN 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93 IESGYRIHCSKSSVRSRRSSPKRKRNRHCSSHQSRSKSHRKRSRSIEDDEEGHLICQSG 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 HYLEARSLINERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSPK 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        33 SHSSTQENRHCKPHHQPKESDCHYLEARSLNERDYRDRRRYVDEYRNDYCEGYVPRHYHRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DVLRARYEIVDTLGEGAFGKVVECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SINFLHHNKITHTDLKPENILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HITTO 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STDPNSVFRCVQMLEWFDHHGHVCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STDPNSVFRCVQMLEWFDHHGHVCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SINFLHHNKLTHTDLKPENILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HHSTLVSTRHYRAPEVILALGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LGPIPQHMIQKTRKRKYFHHNQLDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHBKLFDLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LGPI PQHMIQKTRKRKYFHHNQLDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SH-SVEEDTH-------PSHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSPK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95.9%; Score 2312; DB 9; Length 427; 100.0%; Pred. No. 7.3e-170; Live 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                 Score 2315.5; DB 1:
Pred. No. 4.5e-170;
2; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RRMLEYDPTQRITLDEALQHPFFDLLKKK
NUMBER OF SEQ ID NOS: 439
SOFTWARE: Patentin version 3.2
SEQ ID NO 352
LENGTH: 481
                                                                                                                                                                                                                                                                                                                                                                                                                       96.1%;
96.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 96.2
Matches 432; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: Human
```

438

ያ ያ g

ò

```
APPLICANT: TAN, CHURNA Et al.
APPLICANT: TYAN, CHURNA Et al.
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION OF THE 1003-01-10
CURRENT PILING DATE: 2002-04-01
PRIOR FILING DATE: 2002-04-01
PRIOR FILING DATE: 2001-03-19
PRIOR FILING DATE: 2000-03-19
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 5
SOFTWARE: PSECSED ID NOS: 5
SEQ ID NOS: 5
SED ID NOS: 5
SED ID NOS: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLANWERILGPIPQHMIQKTRKRKYFHHNQ 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLVRRMLEYDPTQRITLDBALQHPF 438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 VKSDYVVKYNSKMKRDERTLKNYDFGSATYDDEHHSTLVSTRHYRAPEVILALGW 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VKSDYVVKYNSKØKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILALGW
                                                                                                                                                                                                                                                                                                                                                                                                                      VKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILALGW
         241 VKSDYVVKYNSKAKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILALGW
                                                                                                                                                                                                                                                                                                                                                                                    Length 427;
                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                      Query Match
95.9%; Score 2312; DB 14;
Best Local Similarity 100.0%; Pred. No. 7.3e-170;
Matches 427; Conservative 0; Mismatches 0;
                                                                                                                                                                       Sequence 4, Application US/10339656; Publication No. US20030134319A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Homo sapien
                                                                                                             FDLLKKK 445
                                                                                                                          FDLLKKK 427
                                                                                                                                                                                                                                                                                                                                               LENGTH: 427
                                                                                                                                                                                                                                                                                                                                                                          US-10-339-656-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              379
                                                                                                              439
                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                        임
                                                                                                        ઠે
                                                                                                                            g
                                     8 6
                                                                           ò
                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                    SOPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGFIPQHMIQKTRKRKYFHHNQ 378
                                                                                                                                                             9
                                                                                                240
                                                                                                                VKSDYVVKXNSKMKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILALGW 318
                                                                                                                          258
                         120
                                           198
                                                    ECIDHGMDGWHVAVKIVKNVGRYREAARSIQVLEHLNSTDPNSVFRCVQMLEWFDHHGH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                       VCIVEBLGLSTYDF1KENSFLPFQIDHIRQMAYQICQSINFLHHNKLTHTDLKPENILF
         RKRNRHCSSHOSRSKSHRRKRSRSIEDDEEGHLICQSGDVLRARYEIVDTLGEGAFGKVV
                                           ECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDPNSVFRCVQMLEWFDHHGH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 427;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ch 35.9%; Score 2312; DB 13; 31 Similarity 100.0%; Pred. No. 7.3e-170; 427; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                              FDLLKKK 445
                                                                                                                                                                                                                                            FDLLKKK 427
                                                                                                                                                                                                                                                                          RESULT 7
US-10-109-854-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S:
Matches 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                       259
                                                                                                                                                                          301
                                                                                                                                                                                           379
                                                                                                                                                                                                            361
                                                                                                                                                                                                                               439
                                                                                                                                                                                                                                               121
                                                                                  199
                                                                                                                                                         319
                               61
                                                 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                      8 6 8
                                                                                                                                                                                                                              8 8
                                                                                                                      8 8 8
                                                                              8 6
```

258 240 318

ö

9

```
Sequence 355, Application US/10267502; Sequence 355, Application US/10267502; Publication No. US20040071700A1; GENERAL INFORMATION:
APPLICANT: Kim, Jaeseob; APPLICANT: Kim, Jaeseob; APPLICANT: Galant, Ron; TITLE OF INVENTION: Obesity Linked Genes; FILE REPERENCE: LSD-07416; CURRENT APPLICATION NUMBER: US/10/267,502; CURRENT PILING DATE: 2003-01-27; NUMBER OF SEQ ID NOS: 439; SEQ ID NO 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      417 RRMLEYDPTQRITLDEALQHPFFDLLKKK 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        93.8%;
93.5%;
                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 93.5
Matches 420; Conservative
                                                                                                                                                                                                                                                                                                                       ; ORGANISM: Mus musculus
US-09-905-999-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-267-502-355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                           APPLICANT: YAN, Chunhua et al.
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ALD MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
FILE REFERENCE: CLOO0758DIV-III
CURRENT APPLICATION NUMBER: US/10/801,671
CURRENT FILING DATE: 2004-03-17
PRIOR FILING DATE: 2000-08-24
PRIOR PILING DATE: 2001-03-19
NUMBER OF SEQ ID NOS: 5
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4
LENGTH: 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSGDVLRARYEIVDTLGEGAFGKVV 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 RKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSGDVLRARYEIVDTLGEGAFGKVV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDPNSVFRCVQMLEWFDHHGH 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 VCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQSINFLHHNKLTHTDLKPENILF 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 VKSDYVVKYNSKWKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILALGW 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LDWDEHSSAGRYVRRCKPLKEFMLCHDEEHEKLFDLVRRMLEYDFTQRITLDEALQHPF 420
 LDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLVRRMLEYDPTQRITLDEALQHPF 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLVRRMLEYDPTQRITLDEALQHPF 438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19 HYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSPK 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HYLEARSLWERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSPK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILALGW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGPIPQHMIQKTRKKKYFHHNQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 199 VCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQSINFLHHNKLTHTDLKPENILF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 427;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0, Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95.9%; Score 2312; DB 16;
100.0%; Pred. No. 7.3e-170;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 25, Application US/09905999
Patent No. US20020106771A1
GENERAL INFORMATION:
                                                                                                                                                 Sequence 4, Application US/10801671
Publication No. US20040152123A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.
Matches 427; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo sapiens
US-10-801-671-4
                                   FDLLKKK 445
                                                           FDLLKKK 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FDLLKKK 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FDLLKKK 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 10
US-09-905-999-25
                                                                                                                 RESULT 9.
US-10-801-671-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          439
                                   439
                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         379
361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
요
                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
```

```
APPLICANT: ULLRICH, Axel
APPLICANT: NAYLER, Oliver
ITILE OF INVENTION: CLA PROTEIN KINASES AND RELATED PRODUCTS AND METHODS
ITILE REPERENCE: 038602/0431
CURRENT APPLICATION NUMBER: US/09/905,999
CURRENT FILING DATE: 1999-07-31
PRIOR APPLICATION NUMBER: PCT/1B97/00946
PRIOR PILING DATE: 1999-06-17
PRIOR PILING DATE: 1997-06-17
PRIOR PILING DATE: 1997-06-17
PRIOR PILING DATE: 1997-06-17
PRIOR PILING DATE: 1997-06-17
PRIOR PELING DATE: 1997-06-17
PRIOR PELING DATE: 1997-06-17
PRIOR PELING DATE: 1997-06-17
PRIOR PELING DATE: 1997-06-17
SPRIOR PELING DATE: 1997-06-17
PRIOR SPOLICATION NUMBER: US 60/034,286
PRIOR FILING DATE: 1996-12-19
NUMBER OF SEQ ID NOS: 26
SEQ ID NO 25
FORMARE: PALENTIN VERSION 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            153 DVLRARYEIVDTLGEGAFGKVVECIDHGMDGLHVAVKIVKNVGRYREAARSEIQVLEHLN 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 213 STDPNSVFRCVQMLEWFDHHGHVCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQ 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          273 SINFLHHNKLTHTDLKPENILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDE 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       57 IESGYRIHCSKSSVRSRRSSPKRKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSG 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 VESTYRIHCSKSSVRSRRSSPKRKRNRPCASHQSHSKSHRRKRSRSIEDDEEGHLICQSG 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SINFLHHNKLTHTDLKPENILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDE 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  297 HHSTLVSTRHYRAPEVILALGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERI 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 333 HHSTLVSTRHYRAPEVILALGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERI 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 117 DVLRARYEIVDTLGEGAFGKVVECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLN 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      177 STDPNSVFRCVQMLEWFDHHGHVCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQ 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13 SHSSTQENRHCKPHHQFKDSDCHYLEARCLNERDYRDRRYIDEYRNDYCEGYVPRHYHRD 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 SH-SVEEDTH------PSHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 481;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 2261.5; DB 9;
Pred. No. 6.5e-166;
8; Mismatches 10;
```

```
US-10-267-502-353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       196
                                                                                                                                                                                                                                                                                                                                                                                                                                  393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 417
                                                                                                                                                                                                                                                                                                          273
                                                                                                                                                                                                                                                                                                                                         297
                                                                                                                                                                                                                                                                                                                                                                                                     357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             453
                                                                                                                                                                                                               177
                                                                                                                                                     117
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                 입
                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                g
                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                               ò
                                                     g
                                                                                         ò
                                                                                                                 g
                                                                                                                                                     ò
                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INVACEAL CHARACTAINS, AREL
APPLICANT: ULLRICH, AXE1
APPLICANT: ULLRICH, AXE1
APPLICANT: ULLRICH, AXE1
APPLICANT: UNXIER, Oliver
TITLE OF INVALTION: CLK PROTEIN KINASES AND RELATED PRODUCTS AND METHODS
FILE REPRENCE: 038662/0431
CURRENT APPLICATION NUMBER: US/10/825,177
CURRENT PILING DATE: 2004-04-16
PRIOR APPLICATION NUMBER: US/20,999
PRIOR PILING DATE: 2001-07-17
PRIOR APPLICATION NUMBER: PCT/IB97/00946
PRIOR PILING DATE: 1997-06-17
PRIOR PELLING DATE: 1997-06-17
                                                                                                                                                                                                    116
                                                                                                                                                                                                                                 152
                                                                                                                                                                                                                                                                176
                                                                                                                                                                                                                                                                                             212
                                                                                                                                                                                                                                                                                                                          236
                                                                                                                                                                                                                                                                                                                                                        STDPNSVFRCVQMLEWFDHHGHVCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQ 272
                                                                                                                                                                                                                                                                                                                                                                                     SINFLHHNKLTHTDLKPENILFVKSDYVVKYNSKWKRDERTLKNTDIKVVDFGSATYDDE 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                    HHSTLVSTRHYRAPEVILALGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLANMERI 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LGPIPQHMIQKTRKRKYFHHNQLDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLV 416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26
                                                                                                                                                                     92
                                                                                                                                                                                                                      93 VESTYRIHCSKSSVRSRRSSPKRKRNRPCASHQSHSKSHRRKRSRSIEDDEEGHLICQSG
                                                                                                                                                                                                                                                                               57 IESGYRIHCSKSSVRSRRSSPKRKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSG
                                                                                                                                                                                                                                                                DVLRARYEIVDTLGEGAFGKVVECIDHGMDGMHVAVKIVKOVGRYREAARSEIQVLEHLN
                                                                                                                                                                                                                                                                                                                            STDPNSVFRCVQMLEWFDHHGHVCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQ
                                                                                                                                        SH-SVEEDTH------PSHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRD
                                                                                                            Gaps
                                                                                                            11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 481;
                                                                               Length
                                                                                                            10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 2261.5; DB 16;
Pred. No. 6.5e-166;
                                                                            Score 2261.5; DB 15;
Pred. No. 6.5e-166;
8; Mismatches 10; I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RRMLEYDPTORITLDEALQHPFFDLLKKK 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 25, Application US/10825177; Publication No. US20040259220A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93.8%;
                                                                               93.8%;
93.5%;
                                                                               Query Match
Best Local Similarity 93.5
Matches 420; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Mus musculus
                                  ORGANISM: Mus musculus
US-10-267-502-355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 12
US-10-825-177-25
      LENGTH: 481
                                                                                                                                                                                                                                                                                                                                                                                                                         273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                417
                                                                                                                                                                                                                                                                                                                                                                                             237
                                                                                                                                                                                                                                                                                                                                                             213
                                                                                                                                                                                                                                                                                                                                                                                                                                                       297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           453
                                                                                                                                             œ
                                                                                                                                                                          33
                                                                                                                                                                                                                                                                   117
                                                                                                                                                                                                                                                                                                  153
                                                                                                                                                                                                                                                                                                                              177
                      TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        용
                                                                                                                                                                   셤
                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                             요
                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                              à
```

Query Match Best Local Similarity

```
~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       136 KVVECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDPNSVFRCVQMLEWFDH 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  293
                                                                                                                                                                                                                                                                                                                                                                  116
                                                                                                                           152
                                                                                                                                                         176
                                                                                                                                                                                       212
                                                                                                                                                                                                                       236
                                                                                                                                                                                                                                                     272
                                                                                                                                                                                                                                                                                   296
                                                                                                                                                                                                                                                                                                                   332
                                                                                                                                                                                                                                                                                                                                                 356
                                                                                                                                                                                                                                                                                                                                                                                                                 416
                                                                                                                                                                                                                                                                                                                                                                                                                                               452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            77
                               26
                                                            92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18 SHYLEARSLNERDYRDRRYVDBYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          78 KRK-RNRHCSSH-QSRSKSHRRKRSRSIEDDEEGHLICQSGDVLRARYEIVDTLGEGAFG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         57 IESGYRIHCSKSSVRSRRSSPKRKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSG
                                                                                                                                                                          STDPNSVFRCVQMLEWFDHHGHVCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQ
                                                                                                                                                                                                                                        237 SINFLHHNKLTHTDLKPENILFVKSDYVVKYNSKMKRDERTLKMTDIKVVDFGSATYDDE
                                                                                                                                                                                                                                                                                                    HHSTLVSTRHYRAPEVILALGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERI
                                                                                                                                                                                                                                                                                                                                                                                                             LGP I POHMI OKTRKRYY FHHNOLDWDEHSSAGRYVRRRCKPLKE FMLCHDEEHEKLFDLV
                                                                                                                                                                                                                                                                                                                                                                                                                                33 SHSSTQENRHCKPHHQPKDSDCHYLEARCLNERDYRDRRYIDBYRNDYCEGYVBRHYHRD
                                                                                                              93 VESTYRIHCSKSSVRSRRSSPKRKRNRPCASHQSHSKSHRRKRSRSIEDDEBGHLICQSG
                                                                                                                                                         DVLRARYEIVDTLGEGAFGKVVECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLN
                               -----PSHYLEARSINERDYRDRRYVDEYRNDYCEGYVPRHYHRD
 Gaps
11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 484;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 78.5%; Score 1893; DB 15; Best Local Similarity 82.3%; Pred. No. 1.7e-137; Matches 353; Conservative 30; Mismatches 44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-267-502-353

US-10-267-502-353

Sequence 353, Application US/10267502

Publication No. US20040071700A1

GENERAL INFORMATION:
APPLICANT: Kim, Jacseob
APPLICANT: Kim, Jacseob
CURRENT ELIVE OF INVENTION: Obesity Linked Genes
FILE REFERENCE: LSD-07416
CURRENT APPLICATION NUMBER: US/10/267,502
CURRENT FILING DATE: 2003-01-27

NUMBER OF SEQ ID NOS: 439

SOFTWARE: Patentin version 3.2

LENGTH: 484
 8; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RRMLEYDPTQRITLDEALQHPFFDLLKKK 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
ORGANISM: Homo sapiens
                                   SH-SVEEDTH-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        쉱
```

8 6 ઠે g ઠે g ઠે g

```
Sequence 5, Application US/10109854

Publication No US20020119548A1

GENERAL INPORMATION:

TTILE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC

TTILE OF INVENTION: THEREOF SECONDING HUMAN KINASE PROTEINS, AND USES

TITLE OF INVENTION: THEREOF SECONDING HUMAN KINASE PROTEINS, AND USES

TITLE OF INVENTION: THEREOF SECONDING HUMAN KINASE PROTEINS, AND USES

TITLE OF INVENTION: THEREOF SECONDING HUMAN KINASE PROTEINS, AND USES

TITLE OF INVENTION: THEREOF SECONDING HUMAN KINASE PROTEINS, AND USES

TITLE OF INVENTION: THEREOF SECONDING HUMAN KINASE PROTEINS, AND USES

PRIOR PEPLICATION NUMBER: 60/227,470

PRIOR PEPLICATION NUMBER: 09/810,671

PRIOR FILING DATE: 2001-03-19

NUMBER OF SEQ ID NOS: 5

SEQ ID NOS: 5

SEQ ID NO 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 LGWSQPCDVWSIGCILIEYYLGFTVPPTHDSKEHLAMMERILGPLPKHMIQKTRKRKYFH 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KVVECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDPNSVFRCVQMLEWFDH 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SHYLESRSINEKDYHSRRYIDEYRNDYTQGCEPGHRQRDHESRYQWHSSKSSGRSGRSSY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KRK-RNRHCSSH-QSRSKSHRRKRSRSIEDDEEGHLICQSGDVLRARYEIVDTLGEGAFG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LGWSQPCDVWSIGCILIBYYLGFTVFQTHDSKEHLAMMERILGPIPQHMIQKTRKRKYFH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HNQLDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFOLVRRMLEYDPTQRITLDEALQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 429;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       78.3%; Score 1887; DB 13;
82.1%; Pred. No. 4.3e-137;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Search completed: August 2, 2005, 22:51:28
Job time : 161 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 82.1%
Matches 352; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HPFFDLLKK 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HPFFDLLKK
                              RESULT 15
US-10-109-854-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-109-854-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CONTROL OF THE REFERENCE CONTROL OF STATE OF STA
195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HGHVCIVPELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQSINFLHHNKLTHTDLKPEN 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   315
                                                                                                           LGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGPIPQHMIQKTRKRKYFH 375
                                                                                                                                       HNQLDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLVRRMLEYDPTQRITLDEALQ 435
                                                                                                                                                                                                                                               KRK-RNRHCSSH-OSRSKSHRRKRSRSIEDDEEGHLICQSGDVLRARYEIVDTLGEGAFG 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGPIPQHMIQKTRKRKYFH 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LGWSQPCDVWSIGCILIEYYLGFTVFPTHDSKEHLAMMERILGPLPKHMIQKTRKRKYFH 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HNQLDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLVRRMLEYDPTQRITLDEALQ 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KVVECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDPNSVFRCVQMLEWFDH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 429;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 45; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 78.3%; Score 1887; DB 9; Best Local Similarity 82.1%; Pred. No. 4.3e-137; Matches 352; Conservative 30; Mismatches 45;
                                                                                                                                                                                                                                                                                                                       HPFFDLLKK 444
                                                                                                                                                                                                                                                                                                                                                                         HPFFDLLKK 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HPFFDLLKK 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HPFFDLLKK 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT CRGANISM: Human US-09-810-671-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-810-671-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                        316
                                                                                                                                                             354
                                                                                                                                                                                                              376
                                                                                                                                                                                                                                                                                                                       436
                                                                                                                                                                                                                                                                                                                                                                         474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                256
```

g

ઠ

임 ò 셤 ò a ઠે a ò 요 ઠે 셤 ઠે 셤

ઠે

7

135 120

9

180 255 240 315 375

THIS PAGE BLANK (USPTO)

Н

```
2, Appli
2, Appli
4, Appli
4, Appli
25, Appli
5, Appli
10, Appli
11, Appli
12, Appli
14, Appli
14, Appli
16, Appli
17, Appli
1
                                                                                                                                                                                                                                                                                    2, 2005, 22:29:12 ; Search time 43 Seconds (without alignments) 772.531 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2, Ar Sequence 2, Ar Sequence 4, Ar Sequence 4, Ar Sequence 4, Ar Sequence 5, Ar Sequence 5, Ar Sequence 5, Ar Sequence 5, Ar Sequence 11, Ar Sequence 11, Ar Sequence 21, Ar Sequence 21, Ar Sequence 22, Ar Sequence 24, Ar Sequence 2, Ar Sequence 4, Ar 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2410
1 MCIPLEASHSVEEDTHPSHY......QRITLDEALQHPFFDLLKKK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          lssued_Patents AA:*
1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-810-671-2
US-10-109-854-2
US-10-139-656-2
US-09-810-671-4
US-10-109-854-4
US-10-109-854-4
US-09-905-999-25
US-09-905-999-21
US-09-805-906-2
US-08-805-110-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               513545 segs, 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                  OM protein - protein search, using sw. model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-801-671-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                               August
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

0000

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2410
2410
2410
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
24110
241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Database
                                                                                                                                                                                                                                                                                               Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Result
```

Appli Appli	USES	0;	09	120	180	240	300
	AND	Gaps	PRHYHRDIESG	EEGHLICQSGDVLR 	STDP 	SINF	THST   THST
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	NS,		HRD HRD	08GI	H H H	8 <u>—8</u>	100 E
Sequence Seq	OTEI	445;	PRHYHRI          PRHYHRI	HLIC	OVLE OVLE	MAYO 	SATY      SATY
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S BC PR	بد و	CEGYV       CEGYV	DEEG 	SEI 	HIRO	70 70 70 70 70 70 70 70
	GNMENTS  INASE PROTEINS, NUCLEIC ENCODING HUMAN KINASE PROTEINS 0,671 n 4.0	Length Indels	NDYC!	SIEDD	REAAJ 	FOID:	DI KW
	. (ANS,	4; 218; 0;	NERDYRDRRYVDEYRND 	SHQSRSKSHRRKRSRSI 	NGRY 	ISPLP   ISPLP	LKAT
64466446666664466	S PROTEINS, NG HUMAN	DB 4 9e-218	RRY 	SHRI 	\$ <u></u>		DERJ DERJ
2557- 6775- 6777- 7775-	ENTS SE PR ODING	2410; No. 5. natches	DYRD DYRD	SRSK 	VAVR 	TYDF TYDF	8—8 
US-08-835-170-2 US-09-359-257-2 US-09-311-674-3 US-09-314-775A-3 US-09-126-646-2 US-09-126-646-2 US-09-314-775A-4 US-09-314-775-5 US-09-314-775-6 US-09-314-775-6 US-09-314-775-6	ALIGNMENTS  1  N KINASE P ES ENCODIN /810,671	ore 2410; ed. No. 5. Mismatches	CNER CNER	0HSS	# H	101.8 	CYNS
800800000000000000000000000000000000000	H X H C	Score Pred. Mism	SARSI 	RHC RHC	HG—HG	78EL1	<u> </u>
	ALL US/09810671 CLATED HUMAN CID MOLECULES HEREOF S8 2001-06-08 S Windows Versi	Ö	HYLE	PKRKRNRHCS           PKRKRNRHCS	ECIL ECIL ECIL		VKSI VKSI
<b>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</b>	/098 TED MOL MOL EOF R: U	100.0%; 100.0%; ive	THPS	SSPK	3K-154	HHGH HHGH	Z - Z - Z - Z - Z - Z - Z - Z - Z - Z -
588 588 508 620 620 630 539 539 763 763 763 763	C BOSELD	/ Match Local Similarity 100 nes 445; Conservative	MCI PLEASHSVEEDTHPSHYLEARSLNERDYRDRRYVDBYRNDYCEGYVPRHYHRDI E 	YRIHCSKSSVRSRRSSPKRKRNRHCSSHQSRSKSHRRKRSRSIEDDEGHLICQSGDVLR 	ARYEI VDTLGEGAFGKVVECIDHGMDGMHVAVKI VKNVGRYREAARSEI OVLEHLNSTDP 	NSVFRCVOMLEWFDHHGHVCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQSINF 	LHHNKLTHTDLKPENILFVKSDYVVKYNSKAKRDERTLKNTDIKVVDFGSATYDDEHHST 
000000000000000000000000000000000000000	Cat:	rit) nse	EAS!	SKSS 	TGV ITGV ITGV		
222 2222 2222 2222 2222 2222 2222 2222 2222	1T 1 9-810-671-2 9-810-671-2 tent No. 64,5291 NERAL INFORMATION: PPLICANT: YAN, Chu ITLE OF INVENTION: ITLE OF INVENTION: ILE REFERENCE: CLO URRENT APPLICATION URRENT FILING DATE URBENT FILING DATE OF SEQ ID NO OFFRENTE: FASTESEE OF INVENTION: ILE REFERENCE: CLO URRENT FILING DATE URRENT FILING DATE URRENT FILING DATE URRENT FILING DATE URRENT FILING ATE OFFRENT FILING AT	mila Co	CIPL	YRIHC       YRIHC	RYEI    RYEI	SVFR   SVFR	HHNK HHNK
5544.5 544.5 544.5 523 523 523 517 517 505 505 505 505 505 505 505 505 505 50	71-2 71-2 NFORI NFORI 1	ch 1 Si 145;		19 19	121 A 121 A	181 N - 181 N	241 E
υυυ 444444 444 <i>ΓΓΓΓΓΓ</i> Γ	LT 1 9-810-671 guence 2, tquence 3, tquence	Mate oca]		• •	7 7	ñ ñ	5 5
8 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	RESULT 1  US-09-810-671-2  Sequence 2, Application  Patent No. 6455291  GENERAL INFORMATION:  APPLICANT: YAN, Chunh  TITLE OF INVENTION:  TITLE OF INVENTION:  TITLE OF INVENTION:  TITLE REFERENCE: CLOOO  CURRENT FILING DATE:  NUMBER OF SEQ ID NOS:  SOFTWARE: FastSEQ for  SOF	Query Match Best Local S Matches 445					
	RESULT US-09- Sequerate Se	X B O	<i>&amp;</i> 8	A 6	상 임	상 점	ر الم
•							
			-				

LVSTRHYRAPEVILALGWSQPCDVWSIGCILIEYYLGFTVPQTHDSKEHLAWMERILGPI 360

301

8 6

ò

PQHMIQKTRKRKYFHHNQLDWDEHSSAGRYVRRCKPLKEFMLCHDEEHEKLFDLVRRML

```
US-10-339-656-2
                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                          ò
                                                       LVSTRHYRAPEVILALGWSQPCDVWSIGCILIEYYLGFTVPQTHDSKEHLAMMERILGPI 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 POHMIQKTRKRKYFHHNQLDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLVRRML 420
                                                                                                                                                                                                                                                                                                                                                                                                    LHHNKLTHTDLKPENILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHST 300
                                                                                                                                                                                                                                                                                                                                                                                                             ARYEIVDTIGEGAFGKVVECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDP 180
                                                                                                                                                                                                                                                                                                                                                 61 YRIHCSKSSVRSRRSSPKRKRNRHCSSHQSRSKSHRKKRSRSIEDDEEGHLICQSGDVLR 120
                                                                                                                                                                                                                                                                                                        61 YRIHCSKSSVRSRRSSPKRKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSGDVLR 120
                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                    1 MCIPLEASHSVEEDTHPSHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESG
361 PQHMIQKTRKRKYFHHNQLDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLVRRML
                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                            Length 445;
                                                                                                                                                                                                                                             100.0%; Score 2410; DB 4; Length
100.0%; Pred. No. 5.9e-218;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421 EYDPTQRITLDEALQHPFFDLLKKK 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2, Application US/10339656
Patent No. 6733978
GENERAL INFORMATION:
                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.
Matches 445; Conservative
                                                                                                                                                                                                         LENGTH: 445
TYPE: PRT
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 3
US-10-339-656-2
                                                                                                                                                                                                                                  US-10-109-854-2
                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                            121
                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                               ઠે
    유
                   ò
                                 a
```

```
APPLICANT: YAN, Chunhua et al.

TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES;
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
CURRENT APPLICATION NUMBER: US/10/339,656
CURRENT APPLICATION NUMBER: 10/109,854
PRIOR FILING DATE: 2003-01-10
PRIOR FILING DATE: 2002-04-01
PRIOR PLICATION NUMBER: 09/810,671
PRIOR PLICATION NUMBER: 09/810,671
PRIOR FILING DATE: 2000-08-24
NUMBER OF SEQ ID NOS: 5
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 4, Application US/09810671

Sequence 4, Application US/09810671

Patent No. 6455291

GENERAL INFORMATION:
APPLICANT: YAN, Chunhua et al
APPLICANT: YAN, Chunhua et al
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
FILE REFERENCE: CLO00758
CURRENT APPLICATION NUMBER: US/09/810,671

CURRENT FILING DATE: 2001-06-08

NUMBER OF SEQ ID NOS: 5
SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ARYEIVDTLGEGAFGKVVECIDHGMDGMHVAVKIVKOVGRYREAARSEIQVLEHLNSTDP 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 YRIHÇSKSSVRSRRSSPKRKRNRHCSSHQSRSKSHRRKRSRSIEDDBEGHLICQSGDVLR 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241 LHHNKLTHTDLKPENILFVKSDYVVKYNSKMKRDERTLKMTDIKVVDFGSATYDDEHHST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 LHHKLTHTDLKPENILFVKSDYVVKYNSKWKRDERTLKNTDIKVVDFGSATYDDEHHST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LVSTRHYRAPEVILALGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361 POHMIQKTRKRYFHHNQLDWDEHSSAGRYVRRRCKPLKEFMLCHDEBHEKLFDLVRRML
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MCIPLEASHSVEEDTHPSHYLEARSLNERDYRDRRYVDBYRNDYCEGYVPRHYHRDIESG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100.0%; Pred. No. 5.9e-218;
Matches 445; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421 EYDPTORITLDEALOHPFFDLLKKK 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421 EYDPTQRITLDEALQHPFFDLLKKK 445
                                                                                                                                                                                                                                                                                                                                              LENGTH: 445
TYPE: PRT
ORGANISM: Homo sapien
```

셤 ઠે g 셤

ò

g

ઠે

요

δ

g

ઠે

ò

유

ò

ઠે g

```
Sequence 4, Application US/10339656;
Sequence 4, Application US/10339656;
Patent No. 6733978
GENERAL INFORMATION:
The Committed of Invention: Soldated by Application THEREOF
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION NUMBER: 10/10339,656
TORRENT FILING DATE: 2000-2-04-01
PRIOR FILING DATE: 2001-03-19
PRIOR FILING DATE: 2001-03-19
PRIOR FILING DATE: 2000-08-24
NUMBER OF SEQ ID NOS: 5
SEQ ID NO 4
SED ID NO 4
SED ID NO 4
                          198
                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                            VKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILALGW 318
                                                                                                                                                                                                                                                                                                                                                                                         241 VKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILALGW 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGPIPQHMIQKTRKRKYFHHNQ 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 SQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGPIPQHMIQKTRKRKYFHHNQ 360
                                                                                                                                                                                                                                                VCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQSINFLHHNKLTHTDLKPENILF 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       79 RKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSGDVLRARYEIVDTLGEGAFGKVV 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 RKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSGDVLRARYEIVDTLGEGAFGKVV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 ECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDPNSVFRCVQMLEWFDHHGH 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 199 VCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQSINFLHHNKLTHTDLKPENILF 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSPK 60
                                                                                                                                                                     ECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDPNSVFRCVQMLEWFDHHGH
                                                                                                                                     ECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDPNSVPRCVQMLEWFDHHGH
                                                                                                                                                                                                                                                                                19 HYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSPK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDPNSVFRCVQMLEWFDHHGH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 427;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 95.9%; Score 2312; DB 4; I Best Local Similarity 100.0%; Pred. No. 9.1e-209; Matches 427; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FDLLKKK 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FDLLKKK 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-339-656-4
                                                                                                                                     139
                                                                                                                                                                                         121
                                                                                                                                                                                                                                                   199
                                                                                                                                                                                                                                                                                                                                                               259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
                               8 8
                                                                                                                                     ઠે
                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 4, Application US/10109854
| Patent No. 663037
| General Moremanical Companication US/10109854
| Patent No. 663037
| General Moremanical Companication Companicat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                         RKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSGDVLRARYEIVDTLGEGAFGKVV 138
                                                                                                                                                                                                                                                                                                                                                                                         ECIDHGMDGMHVAVKIVKOVGRYREAARSEIQVLEHLNSTDPNSVFRCVQMLEWFDHHGH 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VCIVEELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQSINFLHHNKLTHTDLKDENILF 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQSINFLHHNKLTHTDLKPENILF 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 VKSDYVVKYNSKMKRDERTLKATDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILALGW 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGPIPQHMIQKTRKRKYFHHNQ 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LDWDEHSSAGRYVRRCKPLKEFMLCHDEEHEKLFDLVRRMLEYDFTGRITLDEALQHPF 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDPNSVFRCVQMLEWFDHHGH 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGPIPQHMIQKTRKRKYFHHNQ 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLVRRMLEYDPTQRITLDEALQHPF 438
                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSPK 78
                                                                                                                                                                                                                                                                                1 HYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSPR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSPK
                                                                                                                                                                                                                                                19 HYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSPK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILALGW
                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                            ö
                                                                                                                                  Length 427;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 427;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95.9%; Score 2312; DB 4; L
100.0%; Pred. No. 9.1e-209;
iive 0; Mismatches 0;
                                                                                                                                     ; DB 4; I
9.1e-209;
                                                                                                                                                                                            0; Mismatches
                                                                                                                                     95.9%; Score 2312;
                                                                                                                                                                  100.08;
                                                                                                                               Query Match
Best Local Similarity 100.
Matches 427; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 100.
Matches 427; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PDLLKKK 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Human
US-09-810-671-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 5
US-10-109-854-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-109-854-4
LENGTH: 427
                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                            79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                       TYPE: PRT
```

요 à a ઠે 요 ઠે 셤

ઠે

```
57 IESGYRIHCSKSSVRSRRSSPKRKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSG 116
                                                       333 HHSTLVSTRHYRAPEVILALGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERI 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 SH-SVEEDTH------PSHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  87.9%; Score 2117.5; DB 2; Length 451;
88.9%; Pred. No. 1.9e-190;
ive 3; Mismatches 6; Indels 41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Hillman, Jennifer L.
APPLICANT: Lal, Preeti
APPLICANT: Bandman, Olga
APPLICANT: Bandman, Olga
APPLICANT: Shah, Purvi
APPLICANT: Shah, Purvi
APPLICANT: Gueley, Neil C.
APPLICANT: Gueley, Neil C.
APPLICANT: Gueley, Neil C.
APPLICANT: Gueley. Rarl G.
APPLICANT: G.
APPLICANT: G.
APPLICANT: G.
APPLICANT: All G.
APPLICANT: G.
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READBLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/016,000
FILING DATE: HEREWITH
CLASSIFICATION:
                                                                                                                                                                                                                     PF-0465 US
                                                                                                                                                                                                                                                                                                                                                                    US-09-016-000-3
; Sequence 3, Application US/09016000
; Patent No. 596232
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER: 36,749
REGISTRATION NUMBER: 9F
RELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 3: SEQUENCE CHRARACTERISTICS: LENGTH: 451 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 87.9
Best Local Similarity 88.9
Matches 399; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: 650-855-05:
TELEFAX: 650-845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LIBRARY: NEUTFMT01
CLONE: 339963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IMMEDIATE SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-016-000-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY:
STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                    ò
                                                                                                                        q
                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 7

US-09-905-999-25

i Sequence 25, Application US/09905999
; Patent No. 6797513
; GENERAL INFORMATION:
    APPLICANT: ULLARICH, Axel
    APPLICANT: ULLARICH, Axel
    TILLE OF INVENTION: CLK PROTEIN KINASES AND RELATED PRODUCTS AND METHODS
; FILE REFREENCE: 038662/0431
; CURRENT APPLICATION NUMBER: US/09/905,999
; CURRENT FILING DATE: 2001-07-17
; PRIOR APPLICATION NUMBER: PC1/1897/00946
; PRIOR FILING DATE: 1997-06-17
; PRIOR APPLICATION NUMBER: PC1/1897/00946
; PRIOR FILING DATE: 1997-06-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DVLRARYEIVDTLGEGAFGKVVECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLN 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STDPNSVFRCVQMLEWFDHHGHVCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQ 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HHSTLVSTRHYRAPEVILALGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERI 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         57 IESGYRIHCSKSSVRSRRSSPKRKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSG 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  93 VESTYRIHCSKSSVRSRRSSPKRKRNRPCASHQSHSKSHRRKRSRSIEDDEBGHLICQSG 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           153 DVLRARYEIVDTLGEGAFGKVVECIDHGMDGLHVAVKIVKNVGRYREAARSEIQVLEHLN 212
            241 VKSDYVVKXNSKMKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILALGW 300
                                                                                                                                                                                                                            378
                                                                                                                                                                                                                                                                 LDWDEHSSAGRYVRRRCKPLKEFWLCHDEEHEKLFDLVRRWLEYDPTQRITLDEALQHPF 438
                                                                                                                                                                                                                                                                                                                                                                          318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SINFLHHNKLTHTDLKPENILFVKSDYVVKYNSKWKRDERTLKNTDIKVVDFGSATYDDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SH-SVEEDTH-----PSHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRD
                                                                                                                                                                                                                         SQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGBIPQHMIQKTRKRKYFHHNQ
                                                                                                         VKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILALGW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 2261.5; DB 4; Length 481;
Pred. No. 6e-204;
8; Mismatches 10; Indels 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 93.5
Matches 420; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Mus musculus US-09-905-999-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |||||||
421 FDLLKKK 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FDLLKKK 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        177
                                                                                                                                                                                                                                                                                                                                                     379
                                                                                                                                                                                                                                     319
                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       439
                                                       181
                                                                                                               259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
```

<u>ښ</u>

셤

ò

g

ò g ઠે 유

ò

셤

ઠે

ઠે

```
Sequence 5, Application US/10109854

Patent No. 663037

GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES;
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION WHERE: US/10/109,854
CURRENT FILING DATE: 2002-04-01
PRIOR FILING DATE: 2000-08-24
PRIOR FILING DATE: 2000-08-24
PRIOR FILING DATE: 2001-03-19
NUMBER OF SEQ ID NOS: 5
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 5
LENGTH: 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                        435
                                                             121 KVVECIDHKAGGRHVAVKIVKAVDRYCEAARSEIQVLEHLNTTDPNSTFRCVQMLEWPEH 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 ILFVQSDYTEAYNPKIKRDERTLINPDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILA 300
  301 LGWSQPCDVWSIGCILIEYYLGFTVFPTHDSKEHLAMMERILGPLPKHMIQKTRKRKYFH 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301 LGWSQPCDVWSIGCILIEYYLGPTVFPTHDSKEHLAMMERILGPLPKHMIQKTRKRKYFH 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       316 LGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGPIPQHMIQKTRKRKYFH 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     376 HNQLDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLVRRMLEYDPTQRITLDEALQ 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 SHYLESRSINEKDYHSRRYIDEYRNDYTQGCEPGHRQRDHESRYQNHSSKSSGRSGRSSY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    376 HNQLDWDEHSSAGRYVRRRCKPLKEFMLCHDBEHEKLFDLVRRMLEYDPTQRITLDBALQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18 SHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      136 KVVECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDPNSVFRCVQMLEWFDH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  196 HGHVCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQSINFLHHNKLTHTDLKPEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             256 ILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 78.3%; Score 1887; DB 4; Length 429; Best Local Similarity 82.1%; Pred. No. 7.9e-169; Matches 352; Conservative 30; Mismatches 45; Indels
                                                                                                                                           |||||||||
421 HPFFDLLKK 429
                                                                                                                  436 HPFFDLLKK 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   436 HPFFDLLKK 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HPFFDLLKK 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo sapien
                                                                                                                                                                                                                  RESULT 10
US-10-109-854-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-109-854-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       디
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT
                                  $ A
                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 5, Application US/09810671
Patent No. 6451291
Patent No. 6451291
Patent No. 6451291
Patent No. 6451291
APPLICANT: YAN, Chunhua et al
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
FILE REPRESENTE: CLOOOTS8
CURRENT APPLICATION NUMBER: US/09/810,671
CURRENT FILING DATE: 2001-06-08
                                                                                                                  236
                                                                                                                                                           242
                                                                                                                                                                                                                                                                          HHSTLVSTRHYRAPEVILALGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERI 356
                                                                                                                                                                                                                                                                                                                                                           416
                                                           SINFLHHNKLTHTDLKPENILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDE 296
                                                                                                                                                                                                                                       302
                                                                                                                                                                                                                                                                                                    135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LGWSQPCDVWSIGCILIEXYLGFTVPQTHDSKEHLAMMERILGPIPQHMIQKTRKRKYFH 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KVVECIDHGMDGMHVAVKIVKOVGRYREAARSEIQVLEHLNSTDPNSVFRCVQMLEWFDH 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILA 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STDPNSVFRCVQMLEWFDHHGHVCIVFELGLSTYDFIXENSFLPFQIDHIRQMAYQICQ
                                                                                                                                       STDPNSVFRCVQMLEWFDHHGHVCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQ
                                                                                                                                                                                                                    SINFLHHNKLTHTDLKPENILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LGP I PQHM I QKTRKRKY FHHNQLDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKL FDLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KRK-RNRHCSSH-QSRSKSHRRKRSRSIEDDEEGHLICQSGDVLRARYEIVDTLGEGAFG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HGHVCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQSINFLHHNKLTHTDLKPEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HGHICIVPELLGLSTYDFIKENGFLPPRLDHIRKMAYQICKSVNFLHSNKLTHTDLKPEN
                                      DVLRARYEIVDTLGEGAFGKVVECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18 SHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match

78.3%; Score 1887; DB 4; Length 429;
Best Local Similarity 82.1%; Pred. No. 7.9e-169;
Matches 352; Conservative 30; Mismatches 45; Indels
IESGYRIHCSKSSVRSRRSSPKRKRNRHCSSHQSRS-
                                                                                                                                                                                                                                                                                                                                                                                                                                                          RRMLEYDPTQRITLDEALQHPFFDLLKKK 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 5
SOFTWARE: PastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; LENGTH: 429
; TYPE: PRT
; ORGANISM: Human
US-09-810-671-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 9
US-09-810-671-5
                                                                                                                                                                                                                                   243
                                                                                                                                                                                                                                                                                                                                                                                            363
                                      117
                                                                                                                  177
                                                                                                                                                       183
                                                                                                                                                                                                                                                                                                                303
                                                                                                                                                                                                                                                                                                                                                                                                                                   417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
93
                                                                           129
                                                                                                                                                                                                237
                                                                                                                                                                                                                                                                            297
                                                                                                                                                                                                                                                                                                                                                       357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 5
```

g

ઠે

δ

셤 ઠે

ઠે

g

ઠે 음 ò ø

ñ

```
NUMBER OF SEQ ID NOS SOFTWARE: Patentin v SEQ ID NO 12 LENGTH: 484
                                                                       ORGANISM: Human
                                                                                      US-09-457-040B-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-905-999-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-905-999-20
                                                            TYPE: PRT
                                                                                                                                                                                                                               78
                                                                                                                                                                                                                                                                                      136
                                                                                                                                                                                                                                                                                                                                           196
                                                                                                                                                                                                                                                                                                                                                                                                                                                        316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             376
                                                                                                                                                                                                                                                                                                                                                                                                   256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                        ò
                                                                                                                                                                                                움
                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
    Sequence 5, Application US/10339656;
Patent No. 673378
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
FILE REFERENCE: CLOOUTSBILVZ
CURRENT APPLICATION NUMBER: 10/10/339,656
CURRENT APPLICATION NUMBER: 10/10/9,854
FRIOR APPLICATION NUMBER: 10/10/9,854
FRIOR APPLICATION NUMBER: 69/410,671
FRIOR APPLICATION NUMBER: 60/227,470
FRIOR PELICATION NUMBER: 60/227,470
FRIOR FILING DATE: 2000-08-24
NUMBER OF SEQ ID NOS: 5
SEQ ID NO 5
LENGTH: 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KRK-RNRHCSSH-QSRSKSHRRKRSRSIEDDEEGHLICQSGDVLRARYEIVDTLGEGAFG 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 KSKHRIHHSTSHRRSHGKSHRRKRTRSVEDDEBGHLICQSGDVLSARYEIVDTLGEGAFG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KVVECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDPNSVFRCVQMLEWFDH 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILA 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGPIPQHMIQKTRKKKYFH 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                            SHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSP 77
                                                                                                                                                                                                                                                                                                                                                                                                                            HGHVCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQSINFLHHNKLTHTDLKPEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 LGWSQPCDVWSIGCILIEYYLGFTVFPTHDSKEHLAMMERILGPLPFGHMIQKTRKRKYFH
                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                   5;
                                                                                                                                                                                                                                                                                                                                                         Length 429;
                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                    45;
                                                                                                                                                                                                                                                                                                                                                    Query Match

78.3%; Score 1887; DB 4;
Best Local Similarity 82.1%; Pred. No. 7.9e-169;
Matches 352; Conservative 30; Mismatches 45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 12, Application US/09457040B
Patent No. 6387641
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Vertex Pharmaceuticals Incorporated
APPLICANT: Bellon, Steve
TITLE OF INVENTION: Crystallized P38 Complexes
FILE REPERBECE: VPI/98-14
CURRENT APPLICATION NUMBER: US/09/457,040B
CURRENT FILING DATE: 1999-12-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HPFFDLLKK 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421 HPFFDLLKK 429
                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo sapien
US-10-339-656-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 12
US-09-457-040B-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             196
                                                                                                                                                                                                                                                                                                                                                                                                            18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           316
                                                                                                                                                                                                                                                                                               TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        436
                                                                                                                                                                                                                                                                                                                                                                                                                                     임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
```

```
Sequence 20, Application US/0990599
; Sequence 20, Application US/0990599
; Patent No. 6797513
; GENERAL INFORMATION:
; APPLICAMT ULLEIRIH, Axel
; APPLICAMT ULLEIRIH, Axel
; TITLE OF INVENTION: CLK PROTEIN KINASES AND RELATED PRODUCTS AND METHODS
; TITLE OF INVENTION: CLK PROTEIN KINASES AND RELATED PRODUCTS AND METHODS
; TITLE OF INVENTION WIMBER: US/09/905, 999
; CURRENT APPLICATION NUMBER: US/01-07-17
; PRIOR APPLICATION NUMBER: US/01-07-17
; PRIOR PILING DATE: 1999-07-31
; PRIOR APPLICATION NUMBER: US 08/077, 150
; PRIOR APPLICATION NUMBER: US 08/077, 150
; PRIOR PILING DATE: 1997-06-17
; PRIOR PILING DATE: 1997-06-17
; PRIOR PILING DATE: 1997-06-17
; PRIOR PILING DATE: 1996-12-19
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Version 3.0
                                                                                                                                                                                                                                                                                 KRK-RNRHCSSH-QSRSKSHRRKRSRSIEDDEEGHLICQSGDVLRARYEIVDTLGEGAFG 135
                                                                                                                                                                                                                                                                                                                                                                          255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 315
                                                                                                                                                                                                                                                                                                                                                                                                                                         KVVECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDPNSVFRCVQMLEWFDH 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HNQLDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLVRRMLEYDPTQRITLDEALQ 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18 SHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKSSVRSRRSSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGPIPQHMIQKTRKRKYFH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HGHVCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQSINFLHHNKLTHTDLKPEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAPEVILA
                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                           2;
                                                                                                                                                                  Length 484;
                                                                                                                                                          78.3%; Score 1887; DB 3; Length 4 82.1%; Pred. No. 9.4e-169; Live 30; Mismatches 45; Indels
version 3.0
                                                                                                                                                        Query Match 78.3%
Best Local Similarity 82.1%
Matches 352; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HPFFDLLKK 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  474 HPFFDLLKK 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    : Mus musculus
```

75.7%; Score 1824; DB 4; Length 483;

```
RKYFHHNOLDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLVRRMLEYDPTQRITL 430
                                                                                                                                                                                                                                                                                                                                         EWFDHHGHVCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQSINFLHHNKLTHTD 250
                                                                                                                                                                                    LKPENILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRHYRAP 310
                                                                                                                                                                                                                                                    EVILALGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGPIPQHMIQKTRK 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            50 SYHVRSRSSYDDRSSDRRVYDRRYCGSYRRNDYSRDRGDAYYDTDYRHSYBYQRENSSYR 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S30 FDWFDYHGHMCISFELLGLSTFDFLKDNYLPYPIHQVRHMAFQLCQAVKFLHDNKLTHT 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DLKPENILFVNSDYELTYNLEKKRDERSVKSTAVRVVDFGSATFDHEHHSTIVSTRHYRA 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           350 PEVILELGWSQPCDVWSIGCIIFEYYVGFTLFQTHDNREHLAMMERILGPIPSRMIRKTR 409
               SQRSSRRKHRRRRRRRSRIFSRSSSHSSRRAKSVEDDAEGHLIYHVGDWLQERYEIVSTLG 169
                                                                                                                                                                                                      SRRSSPK--RKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSGDVLRARYEIVDTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GEGAFGKVVECIDHGMDGMHVAVKIVKNVGRYREAARSEIQVLEHLNSTDPNSVFRCVQM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DLKPENI LFVKSDYVVKYNSKMKRDERTLKNTDI KVVDFGSATYDDEHHSTLVSTRHYRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         310 PEVILALGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLAMMERILGPIPQHMIQKTR
                                               EGAFGKVVEC1 DHGMDGMHVAVKI VKNVGRYREAARSEI QVLEHLNSTDPNSVFRCVQML
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18 SHYLEARS-----LNERDYRDRRYVDEY-RNDYCEGYVPRHYHRDIESGYRIHCSKSSVR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  190 LEWFDHHGHVCIVFELLGLSTYDFIKENSFLPFQIDHIRQMAYQICQSINFLHHNKLTHŢ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 58.8%; Score 1417; DB 3; Length 499; Best Local Similarity 59.7%; Pred. No. 1.4e-124; Matches 259; Conservative 69; Mismatches 98; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 13, Application US/09457040B
; Patent No. 6387641
; GENERAL INFORMATION;
GENERAL INFORMATION;
; APPLICANT: Vertex Pharmaceuticals Incorporated
; TITLE OF INVENTION; Crystallized P38 Complexes
; TITLE OF INVENTION; Crystallized P38 Complexes
; CURRENT APPLICATION NUMBER: US/09/457,040B
; CURRENT PILING DATE: 1999-12-08
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                             443
                                                                                                                                                                                                                                                                                                                                                                                             DEALQHPFFDLLK
                                                                                                                                                                                                                                                                                                                                                                                                                             470 GEALQHPFFACLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-457-040B-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-457-040B-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 499
TYPE: PRT
                                                                                                                                                 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 13
               110
                                               131
                                                                                 170
                                                                                                               191
                                                                                                                                                                                    251
                                                                                                                                                                                                                    290
                                                                                                                                                                                                                                                      311
                                                                                                                                                                                                                                                                                      350
                                                                                                                                                                                                                                                                                                                        371
                                                                                                                                                                                                                                                                                                                                                                                           431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        290
                                                                                                                                                                                                                                                                                  g
                                       상 원
                                                                                                     ò
                                                                                                                                          g
                                                                                                                                                                                   ò
                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 2.1 Application US/09905999;
Sequence 2.1 Application US/09905999;
Patent No. 6797513;
GENERAL INFORMATION:
APPLICANT: ULLRICH, Axel
APPLICANT: ULLRICH Axel
CURRENT PILING DATE: 03002/0431;
PRIOR APPLICATION NUMBER: US/09/905, 999
CURRENT PILING DATE: 1999-07-31
PRIOR PILING DATE: 1999-07-31
PRIOR PELING DATE: 1999-06-17
PRIOR PELING DATE: 1997-06-17
PRIOR PELING DATE: 1997-06-17
PRIOR PILING DATE: 1997-06-17
PRIOR PILING DATE: 1996-12-19
NUMBER OF SEQ ID NOS: 26
SOFTWARE: PATENTIN Version 3.0
                                                                                                                                                                                                 SVRSRRSSPKRK-RNR-HCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSGDVLRARYEIV 126
                                                                                                                                                                                                                                                                        246
                                                                                                                                                                                                                                                                                      VQMLEWFEHRGHICIVFELLGLSTYDFIKENSFLPFRMDHIRKMAYQICKSVNFLHSMKL 283
                                                                                                                                                                                                                                                                                                                                                           THTDLKPENILFVKSDYTEAYNPKMKRDERTIVNPDIKVVDFGSATYDDEHHSTLVSTRH 343
                                                                                                                                                                                                                                                                                                                                                                                                                             SYHVRSRSSYDDHSSDRRLYDRRYCGSYRRNDYSRDRGEAYYDTDFRQSYEYHRENSSYR 109
                                                                                                                                                   SGRSGRSSYKSKHRSRHHTSQHHSHGKSHRRKRSRSVEDDEEGHLICOSGDVLSARYEIV 163
                                                                                                                                                                                                                                                                                                                                        THTDLKPENILFVKSDYVVKYNSKMKRDERTLKNTDIKVVDFGSATYDDEHHSTLVSTRH 306
                                                                                                                                                                                                                                                                                                                                                                                                         YRAPEVILALGWSQPCDVWSIGCILIEYYLGFTVFQTHDSKEHLANMERILGPIPQHMIQ 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KTRKRKYFHHNQLDWDEHSSAGRYVRRRCKPLKEFMLCHDEEHEKLFDLVRRMLEYDPTQ 426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SRRSS-PKRKRNRHCSSHQSRSKSHRRKRSRSIEDDEEGHLICQSGDVLRARYEIVDTLG 130
                                                                                   9 HSVEEDTHPSHYLEARSLNERDYRDRRYVDEYRNDYCEGYVPRHYHRDIESGYRIHCSKS
                                                                                                                                                                                                                                                                      VOMLEWFDHHGHVCIVFELLGLSTYDFIKENSFLPFQIDHIROMAYQICQSINFLHHNKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SHYLEARS-----LINERDYRDRRYVDEY-RNDYCEGYVPRHYHRDIESGYRIHCSKSSVR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  59.2%; Score 1427.5; DB 4; Length 499; 60.3%; Pred. No. 1.5e-125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. 7.8e-163;
2; Mismatches 52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    69; Mismatches
79.5%; ***
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |||| ||| |||| ||| ||| RITLKEALKHPFFYPLKK 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RITLDEALQHPFFDLLKK 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 19.0
Matches 348; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 14
US-09-905-999-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-905-999-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 261
                                                                                                                                                                   104
                                                                                                                                                                                                                                    164
                                                                                                                                 69
                                                                                                                                                                                                                                                                      187
                                                                                                                                                                                                                                                                                                      224
                                                                                                                                                                                                                                                                                                                                        247
                                                                                                                                                                                                                                                                                                                                                                        284
                                                                                                                                                                                                                                                                                                                                                                                                           307
                                                                                                                                                                                                                                                                                                                                                                                                                                             344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       72
                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                      8
                                                                                                                               ò
                                                                                                                                                            유
                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                             કે
                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

'n.

Gaps

71

129

189

249

309

```
Search completed: August 2, 2005, 22:39:25 Job time : 45 secs
                6 6 6
```

Sequence 136, App Sequence 137, App Sequence 117, App Sequence 119, App Sequence 119, App Sequence 121, App Sequence 211, App Sequence 211, App Sequence 216, App Sequence 216, App Sequence 212, App Sequence 22, App Sequence 24, App Sequence 256, App Sequence 256,

Perfect score:

Sequence:

OM nucleic

ë

Run

88

Minimum Maximum Database

```
Sequence 1, Application US/09810671
Sequence 1, Application US/09810671
Publication No. US20020076783A1
GENERAL INFORMATION:
GURRENT APPLICATION NUMBER:
GURRENT FILING DATE:
SOFTWARR:
FREE SEQ ID NOS:
SOFTWARR:
FREE SEQ ID NOS:
SEQ ID NO:
FREE SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTGACGAATAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGTGCATCCCTCTTGAAGCTTCGCACTCTGTTGAAGAGGACACTCATCCCGGTCATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGTGCATCCCTCTTGAAGCTTCGCACTCTGTTGAAGAGGACACTCATCCCAGTCATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 9; Length 2354;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indela
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 1335;
ilarity 100.0%; Pred. No. 0;
Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ALIGNMENTS
                                                                                                                                                                                                                      1664
22516
22516
22516
1500
11973
11973
11973
11538
11538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
      TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Simi
Matches 1335;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 2354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-810-671-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-810-671-1
                                                                                                                                         768.8
642.8
642.8
640.6
638.4
638.4
638.4
639.4
639.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                             499.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                               481
        \\
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 135, App
Sequence 138, App
Sequence 26, Appl
                                                                                                                                       August 3, 2005, 18:57:31 ; Search time 862.014 Seconds (without alignments) 10023.729 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                1 atgtgcatccctctgaagc......ttgacttattaaaaaagaaa 1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Published Applications NA:*

1: /cgn2_6/ptodata/2/pubpna/USO7_PUBCOMB.seq:*

2: /cgn2_6/ptodata/2/pubpna/DSO6_NEW_PUB.seq:*

3: /cgn2_6/ptodata/2/pubpna/USO6_NEW_PUB.seq:*

4: /cgn2_6/ptodata/2/pubpna/USO6_NEW_PUB.seq:*

5: /cgn2_6/ptodata/2/pubpna/USO6_PUBCOMB.seq:*

6: /cgn2_6/ptodata/2/pubpna/USO9_NEW_PUB.seq:*

7: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*

6: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*

7: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*

10: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*

10: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*

12: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*

13: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*

14: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*

15: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*

16: /cgn2_6/ptodata/2/pubpna/USO9_PUBCOMB.seq:*

16: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

17: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

18: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

19: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

20: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

21: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

22: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

23: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

24: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

25: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

26: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

27: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

28: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

29: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

20: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

22: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

23: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

24: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

25: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

26: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

26: /cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                   14575566
                      GenCore version 5.1.6
(c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-109-854-1
US-10-339-656-1
US-10-801-671-1
US-10-267-502-135
US-10-267-502-138
US-09-905-999-26
                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                             7287783 segs, 3236178273 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-810-671-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                          US-10-801-671-1_COPY_33_1367
1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match O%
Maximum Match 100%
Listing first 45 summaries
                                                                                                 nucleic search, using sw model
                                                                                                                                                                                                                                                                                                   IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                             length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2354
2354
2354
2354
1446
1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                         Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0
100.0
100.0
100.0
96.1
82.0
                                                                                                                                                                                                                                                                                                   Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                               sed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1335
1335
1335
1335
1034.2
```

Sequence Sequence Sequence

ö

ö

Result

8 8

8 8 8

ે

```
; GARGRAL ILLOUGHILLY CHULUNIA et al.

APPLICANT: YAN, CHUNDHA et al.

TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC

TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES

TITLE OF INVENTION: THEREOF

TITLE OF INVENTION: THEREOF

CURRENT APPLICATION NUMBER: US/10/109,854

CURRENT APPLICATION NUMBER: 60/22,470

PRIOR APPLICATION NUMBER: 60/22,470

PRIOR PLING DATE: 2000-08-24

PRIOR PLING DATE: 2001-03-19

NUMBER OF SEQ ID NOS: 5

SOFTWARE: FRACES FRACES FRACES OF WINDOWS VERSION 4.0

SEQ ID NO 1

LENGTH: 2354
                                                                                                                                                                                                                                                                                                                                                                                                         CGCAATAGACACTGTTCAAGTCATCAGTCAGGTTCGAAGACCACCGAAGGAAAAGATCC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAGTGGAGACGTTCTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTGAAAGCGGG
                                         DB 13; Length 2354;
                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1335; Conservative 0; Mismatches
                                                                                                      RESULT 2
US-10-109-854-1
; Sequence 1, Application US/10109854
; Publication No. US20020119548A1
; GENERAL INFORMATION:
                                                                        TTATTAAAAAAAAA 1335
                                                                                                                                                                                                                                                          TYPE: DNA
CORGANISM: Homo sapien
US-10-109-854-1
                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                          273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      393
                                                                                                                                                                                                                                                                                                                                                                                121
                                                                1321
      1201
                                   1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ∂
                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                   ð
                                              영양
                                                                           g
               ያ ያ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCACAACACATGATTCAGAAAAACAAGAAAAGGCAAGTATTTCACCATAACCAGCTAGAT 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                             TITCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAGGACCCATA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   812
                                                                                                                                                                                                                                                                                                                                                                                                               TIGGIGICIACCCGGCACIACAGAGCICCCGAGGICATITIGGCITIAGGITGGICICAG 960
                                                                                                                                                                                                                                                                                                                                                                                                                         TCTGACTATGTAGTGAAATATAATTCTAAAATGAAACGTGATGAACGCACACTGAAAAAC 840
                                                                                                                                                                                                                                                                                                                                                                   872
                                                                                                                                                                                                                                                                                                                                                                                 ACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGAACATCACAGTACT 900
                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                TACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTACTGATCCC 540
                                                                                                                                                                                                                                                           ATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACAGCTTTCTG 660
                                                                                                                                                                                                                                                                    240
                                                                          300
                                                                                        332
                                                                                                       360
                                                                                                                       392
                                                                                                                                     420
                                                                                                                                                    452
                                                                                                                                                                   480
                                                                                                                                                                                 512
                                                                                                                                                                                                                             541 AATAGTGTCTTCCGATGTGTCCAGATGCTAGAATGGTTTGATCATCATGGTCATGTTTGT 600
                                                                                                                                                                                                                                             632
                                                           272
                             212
                                                                                                                                                                                                                                                                                                                                   CCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCCAGTCAATATTT
                                                                                                                                                                                                                                      TATGGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAGGAAGCAGTCCTAAAAGGAAG
                                                                         AGGAGTATAGAGGAGGAGGAGGGGTCACCTGATCTGTCAAAGTGGAGACGTTCTAAGA
                                                                                                              GCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGTGC
                                                                                                                                                                   ATTGATCATGGCATGGCATGCATGTAGCAGTGAAAATCGTAAAAATGTAGGCCGT
                                                                                                                                                                             TTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTGACGAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1021
                                                                                                                                                                                                                                                                                                                                          753
                                                                                                                                                                                                                                                                                                                                                                       813
                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                    873
                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                                                                                   933
                                                                                                                                                                                                                                                                                                                                                                                                                                                  961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 993
                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                        781
                                                                                            273
                                                                                                          301
                                                                                                                          333
                                                                                                                                                                                                                                                 573
                                                                                                                                                                                                                                                                              633
                                                                                                                                                                                                                                                                                                           693
                                                                                                                                                        393
                                                                                                                                                                                     453
                                                                                                                                                                                                                   513
                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                             661
                                                181
                                                                             241
                                                                                                                                         361
                                                                                                                                                                      421
                                                                                                                                                                                                     481
                                                                                                                                                                8 6 8 6 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8ે
                                                                                                                                                                                                                                                                                                                      8 8 8
                                                                                                                                                                                                                                                                                                                                                                   요 상
                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                       g
                                                                                                                                        상 원
                                                                                         a
                                                                                                        ò
```

ö

ö

9 92 480

512

360

332

212

180

8 & ठ

a

g

음 ò

ઠે

8 8 8

g

ઠ

셤

ઠે

셤

ò

g

ઠે

g

ઠે

ઠે

g

a ઠે

ઠે

```
300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                         152
                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                              212
                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                  272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          812
                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                   92
                                                                                                                                                                                                                                                                          TTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTGAATAC
                                                                                                                                                                                                                                                                                                                                                                                   153 AGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTGAAAGCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                    TATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAGAAGCAGTCCTAAAAAGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTGACGAATAC
                                                                                                                                                                                                                                                                                                                                                                   121 AGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTGAAAGCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                        TATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAGGAAGCAGTCCTAAAAAGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGAGTATAGAGGATGATGAGGGTCACCTGATCTGTCAAAGTGGAGACGTTCTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAGTGGAGACGTTCTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAAGATATGAAATCGTGGACACTTTGGGTGAAGGGGGCCTTTGGCAAAGTTGTAGAGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATAGTGTCTTCCGATGTGCCAGATGCTAGAATGGTTTGATCATCATGGTCATGTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTGACTATGTAGTCAAATATAATTCTAAAATGAAAGGTGATGAACGCACACTGAAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTGATCATGGCATGGATGGCATGCATGTAGCAGTGAAAATCGTAAAAAATGTAGCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTACTGATCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACGGCTTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u> ATGTGCATCCCTCTTGAAGCTTCGCACTCTGTTGAAGAGGACACTCATCCCAGTCATTAT</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTGATCATGGCATGGCATGCATGTAGCAGTGAAAATCGTAAAAATGTAGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATAGTGTCTTCCGATGTGTCCAGATGCTAGAATGGTTTGATCATCATGGTCATGTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTIGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACAGCTTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAATAAATTTT
                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                        Length
                                                                                                                                                                                                        DB 15;
                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                      ; Score 1335; I; Pred. No. 0; 0; Mismatches
CURRENT FILING DATE: 2003-01-10
PRIOR APPLICATION NUMBER: 10/109,854
PRIOR FILING DATE: 2002-04-01
PRIOR FILING DATE: 2001-03-19
PRIOR PELLING DATE: 2001-03-19
PRIOR PILING DATE: 2001-03-19
PRIOR FILING DATE: 2001-03-19
NUMBER OF SEQ ID NOS: 5
SOFTWARE: FASISEQ for Windows Version 4.05
                                                                                                                                                                                                      100.0%;
                                                                                                                                                                                                    Query Match
Best Local Similarity 100.
Matches 1335; Conservative
                                                                                                                                                   ; TYPE: DNA
; ORGANISM: Homo
US-10-339-656-1
                                                                                                                                       LENGTH: 2354
                                                                                                                                                                                                                                                                                     33
                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                          93
                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                   213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTTTCACGTC 1052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCACAACACATGATTCAGAAAACAAGAAACGCAAGTATTTTCACCATAACCAGCTAGAT 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGTTGAAGGAA 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTATGCTTTGTCATGATGAAGACATGAGAAACTGTTTGACCTGGTTCGAAGAATGTTA 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAGGACCCATA 1080
                                        572
                                                                                                                                                                                                                                                                                   TIGGIGICTACCCGGCACTACAGAGCTCCCGAGGTCATTITGGCTTTAGGTTGGTCTCAG 960
                                                                   600
                                                                                             632
                                                                                                                        9
                                                                                                                                                   692
                                                                                                                                                                             720
                                                                                                                                                                                                      752
                                                                                                                                                                                                                                                          812
                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                   932
                                                                                                                                                                                                                                TIACATCATAATAAATTAACCCATACAGATCTGAAGCCTGAAAATATTTTGTTTTGTGAAG 780
               Sequence 1, Application US/10339656
; Publication No. US20030134319A1
; GENERAL INFORMATION:
; APPLICANT: YAN, Chunhua et al.
; TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
; TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: CLOO758D1V2
; CURRENT APPLICATION NUMBER: US/10/339,656
                                                                                  AATAGTGTCTTCCGATGTGTCCAGATGCTAGAATGGTTTGATCATCATGGTCATGTTTGT
                                                                                                                                      ATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACAGCTTTCTG
                                                                                                                                                                          CCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAATAAATTTT
                                                                                                                                                                                          CCATITCAAATIGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAATAAATTIT
                                                                                                                                                                                                                                               ACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGATGACATCACGTACT
                                                                                                                                                                                                                                                                                                                                                         ATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACAGCTTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTTTTCACAGTC
                                                                   AATAGTGTCTTCCGATGTCTCCAGATGCTAGAATGGTTTGATCATCATGGTCTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTATTAAAAAGAAA 1335
||||||||||||||||
TTATTAAAAAGAAA 1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1353
                                                                                             573
                                                                                                                                                                                                                                                         753
                                                                                                                                                                                                                                                                                                                                                                873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1261
                                        513
                                                                   541
                                                                                                                        601
                                                                                                                                                 633
                                                                                                                                                                          661
                                                                                                                                                                                                     693
                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                              813
                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                        933
                                                                                                                                                                                                                                                                                                                                                                                                                                                  961
```

121 AGANTGOAGGICCTTGAAGGIANTTCTCAGACCTTACACGACCTGAAGGACTTGAAGGGGG 190  121 AGANTGACCTGCGAAGGIANTCTTCCTAGACTTATCACGAGACATTGAAGGGGG 190  121 THTCAATCCACCTGCGAAGGIANTCTTCCACACCACGAGAGACACCTCTAAAGGAAG 272  121 THTCAATCCACCTGCGATAAATTCTTCAGTCCCCACGAGAGAACACCTCTAAAAGGAAG 272  121 THTCAATCCACCTGCGAAAATTCACTCACCACCTCCAAGGAGAAGACACTCTTAAACACACGAGAGAAGAAGAAG 272  122 CGCAATCACACCTTCCAGTCAAATTCACTCACCTCCAAGAGAAAAATTCTCAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAG
8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6
### STANDARD CONTRIBUTION OF THE PROPERTY OF THE PROPETTY OF THE PROPETTY OF T

S

g

ઠે

g ò

δ

```
1060
                                                                                                                                                                                                                                                                                                                                                                                                                           1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1301 TGAAGGAATTTATGCTTTGTCATGATGAACATGAGAAACTGTTTGACCTGGTTCGAA 1360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            941 TGAAAAACACAGATATCAAAGTTGTTGTGTGAAGTGCAACGTATGATGATGATGATGATGATC 1000
                                                                                                                                                                                                                                                                                                                                                                                              GGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTT 1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1013 TCACAGTCTTTCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAG 1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1241 AGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGT 1300
                                                                                                                                                                                                                                                                                                                             952
                                                               712
                                                                                                                              772
                                                                                                                                                                                                                881 TTGTGAAGTCTGACTATGTAGTCAAATATAATTCTAAAATGAAAGGTGATGAAGGCACAC 940
                                                                                            820
                                                                                                                                                            880
                                                                                                                                                                                             832
                                                                                                                                                                                                                                                              TGAAAAACACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGAAGACATC 892
652
                                                                                                                                               821 TAAATTTTTTACATCATAATAAATTAACCCATACAGATCTGAAGCCTGAAAAATATTTGT
                                                                                                                                                                                                                                                                                                                                              1121 TCACAGTCTTTCAGACTCATGATAGTAAAGGCACCTGGCAATGATGAAGGAATATTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1061 GGTCTCAGCCTTGTGAGTTTTGGAGCATAGGTTGCATTCTTATTGAATATTTACCTTGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACCCATACCACAACAAGATTCAGAAAACAAGAAAACGCAAGTATTTCACCATAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAGCATCCTT
                 701 ATGITIGITIGITIGAACTACTGGGACTTAGTACTACGATTTCATTAAAGAAAACA
                                                                                                                                                                                             TTGTGAAGTCTGACTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGAACGCACAC
                                                               GCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAA
                                                                                                                                                                                                                                                                                                                             893 ACAGTACTTTGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAAGGAATTTATGCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAA
ATGITTGTATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            82.0%; Score 1094.2; DB 18; Length 1446;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-267-502-138
Sequence 138, Application US/10267502
Publication No. US20040071700A1
SERERAL INFORMATION:
APPLICANT: Kim, Jaeseob
APPLICANT: Galant, Ron
TITLE OF INVENTION: Obesity Linked Genes
FILE REFERENCE: LSD-07416
CURRENT FILING DATE: 2003-01-27
UNDMERN FILING DATE: 2003-01-27
SOFTWARE: PATENTIN OF SEQ ID NOS: 439
SEQ ID NO 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTTTGACTTATTAAAAAGAAA 1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: MUB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-267-502-138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 1446
 593
                                                                                                                               713
                                                                                                                                                                                             773
                                                                                                                                                                                                                                                              833
                                                                                                                                                                                                                                                                                                                                                                                              953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1421
                                                               653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                      g
                                                               ò
                                                                                       g
                                                                                                                            ò
                                                                                                                                                         요
                                                                                                                                                                                             ò
                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        윤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
             TTTATGCTTTGTCATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAAGAATGTTA 1260
                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACGAATACAGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTG 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGGAAGCGCAATAGACACTGTTCAAGTCATCAGTCACGTTCGAAGAGGGCCACCGAAGGA 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAGTGGAGACG 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TICTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTG 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGATCCAGGAGTATAGAGGATGATGAGGGGGCCCCCTGATCTGTCAAAGTGGAGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACGAATACAGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCTAAAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAGAAGCAGTCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAGAGTGCATTGATTGGATTGGATTGCATTGTAGCAGTGAAAAATCGTAAAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAGAGTGCATTGATCATGGCATGGATGGCATGCATGTAGCAGTGAAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGATCCCAATAGTGTCTTCCGATGTGCTAGAATGGTTTGATCATCATGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 18; Length 1446;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96.1%; Score 1283; D
100.0%; Pred. No. 0;
iive 0; Mismatches
                                                                                                                                                                                                                                                       Sequence 135, Application US/10267502
| Publication No. US20040071700A1
| GENERAL INFORMATION:
| APPLICANT: Kim, Jaeseob
| TITLE OF INVENTION: Obesity Linked Genes
| FILE REFERENCE: LSD-07416
| CURRENT APPLICATION NUMBER: US/10/267,502
| NUMBER OF SEQ ID NOS: 439
| NUMBER OF SEQ ID NOS: 439
                                                                                                                                             TTATTAAAAAAAAA 1335
                                                                                                                                                              Query Match
Best Local Similarity 100.
Matches 1283; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                            RESULT 5
US-10-267-502-135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-267-502-135
                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 1446
                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 135
                                            1233
                                                                            1261
                                                                                                             1293
                                                                                                                                             1321
                                                                                                                                                                            1353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            641
               1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          533
```

吕

g

ò

ઠે 유 ठे g

g ઠે g 8 8

ઠે

ò 유 셤

ઠે

```
US-09-905-999-26

Justice 26, Application US/09905999

Sequence 26, Application US/09905999

Sequence 26, Application US/09905999

Batent No. US20020106771A1

GENERAL INFORMATION:

APPLICANT: ULLRICH, Axel

TITLE OF INVENTION: CLK PROTEIN KINASES AND RELATED PRODUCTS AND METHODS

TITLE OF INVENTION: CLK PROTEIN KINASES AND RELATED PRODUCTS AND METHODS

TITLE OF INVENTION: CLK PROTEIN KINASES AND RELATED PRODUCTS AND METHODS

CURRENT FILING DATE: 1999-07-31

PRIOR APPLICATION NUMBER: DC7/1897/00946

PRIOR APPLICATION NUMBER: PC7/1897/00946

PRIOR APPLICATION NUMBER: DS 08/877,150

PRIOR PILING DATE: 1997-06-17

PRIOR PELING DATE: 1997-06-17

PRIOR PELING DATE: 1997-06-17

PRIOR PELING DATE: 1996-12-19

NUMBER OF SEQ ID NOS: 26

SOFTWARE: PALENTIN VERSION 3.0

SEQ ID NO 26

LENGTH: 1549

TYPE: DNA

ORGANISM: MUS mUSCULUS

US-09-905-999-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1181 GACCCATCCCAGCACATATGATCCAGAAGACAAGGAAACGCAAGTATTTCCACCATAACC 1240
                                                                                                                       173 pangegaganareganarecheragananarerrecherecechechagananarerra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGGAAGCGCAATAGACACTGTTCAAGTCATCAGTCACGTTCGAAGAGCCCACCGAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAGTGGAGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    113 ACGAATACAGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTCATTATTTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTG
                                                   GAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAGCATCCTT
                                                                                                                                                                                       TGAAGGAATTTATGCTTTTGTCATGATGAACATGAGAAACTGTTTGACCTGGTTCGAA
                                   AGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1549;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 1094.2; DB 9;
Pred. No. 6.3e-293;
0; Mismatches 118;
                                                                                                                                                                                                                                       TCTTTGACTTATTAAAAAGAAA 1335
                                                                                                                                                                                                                                                               1421 TCTTTGACTTATTAAAAAGGAAA 1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 82.0%;
Best Local Similarity 90.8%;
Matches 1165; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     293
                                                                            1241
                                                                                                                                                                                                              1361
                                                                                                                                                                                                                                               1313
                                                                                                            1193
                                                                                                                                            1301
                                                                                                                                                                              1253
                                          1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ρp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                              중 음
                                                                                                   & g
                                                                                                                                                                    8
                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Aragractricercrice cacade ce con constructive de la constructive de la
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTT 1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACCCATACCACAACACATGATTCAGAAAACAGAAAACGCAAGTATTTTCACCATAACC 1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACAGTACTTTGGTGTGTTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTT 952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Argriridratriciciritcaccrecrecrescratectrarearriratraagaaaara 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAA 712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            592
                                ö
                                                                                                                                172
                                                                                                                                                                  280
                                                                                                                                                                                                  232
                                                                                                                                                                                                                                    340
                                                                                                                                                                                                                                                                  292
                                                                                                                                                                                                                                                                                                    400
                                                                                                                                                                                                                                                                                                                                      352
                                                                                                                                                                                                                                                                                                                                                                      460
                                                                                                                                                                                                                                                                                                                                                                                                      412
                                                                                                                                                                                                                                                                                                                                                                                                                        TAGAGTGCATTGATCATGGCATGGCATGCATGTAGCAGTGAAAAATCGTAAAAAATG 472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            640
                                                              112
                                                                                              220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCACAGAGTCTTTCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGAAAAACACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGAACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGITTGTATTGAAGTACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAAATTTTTACATCATAATAAATTAACCCATACAGATCTGAAGCCTGAAAATATTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGATCCCAATAGTGTGTTCCGATGTGCTGGATGCTTGATGGTTTGATCATCATCGTC
                                                                                  AAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAAGCAGTA
                                                                                                                                                                                                                      181 MAGGACTTACCGGATCCATTGCAGTAAATCCTCAGTCAGGAGGAGGAGGAGGAGCGCGCTA
                                                                                                                                                                                                                                                                    233 AAAGGAAGCGCAATAGACACTGTTCAAGTCATCAGTCACGTTCGAAGAGCCCACCGAAGGA
                                                                                                                                                                                                                                                                                        AAAGATCCAGGAGTATAGAGGATGATGAGGAGGTCACCTGATCTGTCAAAGTGGAGAGCG
                                                                                                                                                                                                                                                                                                                                                        TICTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGAGCCCTTTGGCAAAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAGAGTGCATTGATCACGGCATGGATGGCTTACATGTACAGGAGGAGAAATTGTAAAAATG
                                                                                                                                ACGAATACAGGAATGACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTG
                                                                                                                                                    GTCATTATTTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTG
                                Gaps
                                ö
                                Indels
                Pred. No. 6e-293;
0; Mismatches 118;
                   90.88;
                   Best Local Similarity 90.8
Matches 1165; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         773
                                                                                                                                                                                                                                                                                                           341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     653
                                                                                                                                         113
                                                                                                                                                                                                         173
                                                                                                                                                                                                                                                                                                                                             293
                                                                                                                                                                                                                                                                                                                                                                             401
                                                                                                                                                                                                                                                                                                                                                                                                             353
                                                                                                                                                                                                                                                                                                                                                                                                                                               461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   473
                                                                       53
                                                                                                       161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ብ ራ ብ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 & 8
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                          ठ व ठ
                                                                                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                           ò
                                                                         ò
                                                                                              g
                                                                                                                                  ð
                                                                                                                                                                g
                                                                                                                                                                                                Ġ
                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                  ò
```

ö

Gaps

ö

298 172 358 232 418 292 478 352 538

```
TITLE OF INVENTION: CLK PROTEIN KINASES AND RELATED PRODUCTS AND METHODS
FILE REFERENCE: 038602/0431
CURRENT APPLICATION UNDMBER: US/10/825,177
CURRENT FILING DATE: 2004-04-16
PRIOR PLING DATE: 2001-07-17
PRIOR FLING DATE: 1999-07-31
PRIOR FLING DATE: 1999-07-31
PRIOR FLING DATE: 1999-06-17
PRIOR PLING DATE: 1999-06-17
PRIOR PLING DATE: 1999-06-17
PRIOR PLING DATE: 1997-06-17
PRIOR PLING DATE: 1996-12-19
NUMBER OF SEQ ID NOS: 26
NUMBER OF SEQ ID NOS: 26
                                                                                                                                                                                                                                                                                                                                                                                                                     113 ACGAATACAGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTG 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               299 ATGAATACAGAAATGACTACTGCGAAGGATATGTTCCAAGACATTACCATAGAGACGTTG 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAGGAAGCGCAATAGACACTGTTCAAGTCATCAGTCACGTTCGAAGAGCCCACCGAAGGA 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAGTGGAGACG 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCTAAGAGCAAGATATGAAATCGTGGACACTTTAGGTGAAGGAGCCTTTTGGCAAAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 659 TAGGACGTTACCGGGAGGAGCTCGTTCTGAAATCCAAGTATTGGAGCACTTGAACAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGGAAAGGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  599 TAGAGTGCATTGATCACGCCATGGATGGCTTACATGTAGCAGTGAAAATTGTAAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         719 CTGACCCCCAACAGTGTCTTCCGATGCGTCCAGATGCTAGAGTGGTTGATCATCATGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     779 ATGITTGHITTTGAGCTGCTGGGACTTAGTACTATGATTTTATTAAAGAAATA
                                                                                                                                                                                                                                                                                                                                                                                                    53 GTCATTATTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          173 AAAGCGGGTATCGAATCCACTGCAGTAATCTTCAGTCCGCAGCAGGAGAAGCAGTCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGATCCCAATAGTGTCTTCCGATGTCCAGATGCTAGAATGGTTTGATCATCATGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     593 ATGTTTGTATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACA
                                                                                                                                                                                                                                                                                                                                        Length 1549;
                                                                                                                                                                                                                                                                                                                                        Score 1094.2; DB 20; Lengt
Pred. No. 6.3e-293;
0; Mismatches 118; Indels
                                                                                                                                                                                                                                                                                                                                      DB 20;
                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 90.8%;
Matches 1165; Conservative
                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Mus musculus
US-10-825-177-26
                                                                                                                                                                                                                                                                LENGTH: 1549
                                                                                                                                                                                                                                                SEQ ID NO 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           533
                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                 .019 TGAAAAACACAGATATCAAAGTTGTTGGATTTTGGAAGTGCAACATATGACGACGAACATC 1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCACAGTCTTTCAGACTCATGATAGTAAAGAGCACTGGCAATGATGGAGGAACGAATATTAG 1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACCCATACCACACACATGATTCAGAAAACAAGAAAACGCAAGTATTTTCACCATAACC 1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGT 1192
                                                                              532
                                                                                                                                                                                                    652
                                                                                                                                                                                                                                838
                                                                                                                                                                                                                                                                                          868
                                                                                                                                                                                                                                                                                                                        772
                                                                                                                                                                                                                                                                                                                                                                                    TIGIGAAGICIGACIAIGIAGICAAAIAIAAIICIAAAAIGAAACGIGAIGAACGCACAC 832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1079 ATAGTACTTTGGTGTCCACAAGGCACTACAGGCTCCAGAGGTCATTTTGGCTCTAGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAGGACGTTACCGGGAGGCAGCTCGTTCTGAAATCCAAGTATTGGAGCACTTGAACAGCA
                                                                                                                                                          CTGACCCCAACAGTGTCTTCCGATGCGTCCAGATGCTAGAGTGGTTTGATCATCATGGTC
                                                                                                                                                                                                  ATGITTGTATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACA
                                                                                                                                                                                                                 | CTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAA
                                                                                                                                                                                                                                                                                                                     AGCTAGATTGGGACGAGCATAGTTCAGCTGGGAGATATGTTAGGAGACGCTGCAAGCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAAAGGAATTTATGCTGTGTCATGACGAAGAGCATGAGAAGCTGTTTGACCTGGTTCGAA
                                                                              TAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTA
                                                                                                                                       CTGATCCCAATAGTGTCTTCCGATGTCCAGATGCTTTGATCATCATGGTC
                                                                                                                                                                                                                                                                                          GITITICIGCCATITICAAATIGATCACATCAGGCAAATGGCTTATCAGATCTGCCAGTCTA
                                                                                                                                                                                                                                                                                                                                                   raaattttttacatcataattaacacacacacacacataaaacctgaaaatattttat
                                                                                                                                                                                                                                                                                                                                                                                                                                                TGAAAAACACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGATGACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGAAGGAATTTATGCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACAGTACTTTGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTTAGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTTTGACTTATTAAAAAGAAA 1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1499
                                                                           473
                                                                                                         629
                                                                                                                                                                                                                                                                                         839
                                                                                                                                                                                                                                                                                                                                                                                                               959
                                                                                                                                                                                                                                                                                                                                                                                                                                                833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1193
                                                599
                                                                                                                                       533
                                                                                                                                                                     719
                                                                                                                                                                                                 593
                                                                                                                                                                                                                               779
                                                                                                                                                                                                                                                             653
                                                                                                                                                                                                                                                                                                                        713
                                                                                                                                                                                                                                                                                                                                                     899
                                                                                                                                                                                                                                                                                                                                                                                  773
                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                             දු ද
                                                                                                                                                                                                                                                                                                                                                임
                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             윰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                       g
                                                                                                 ద
                                                                                                                                                           g
                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 6
                                                                   ે
                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
```

Gaps

ö

232

478

538 412 598 472

658 532 718 592 778 838

712 868 772 928

653 GCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAA

ò a ò a

Sequence 26, Application US/10825177; Publication No. US20040259220A1; GENERAL INFORMATION: APPLICANT: ULLRICH, Axel; APPLICANT: NAYLER, Oliver

US-10-825-177-26

713 TAAATTTTTACATCATAATAAATTAACCCATACAGATCTGAAGCCTGAAAATATTTTGT

```
1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1205
                                                                                                                                                                                                                                                                                                                                                                                                                                              2901
                                                                                                                                                                                                                                                                                                                                                           GACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAGGACCCATACCACA 1085
                                                                                                                                                                                                                                                                                                                                                                                                             2841
                                                                                                                                                                                                                                                                                                          2661
                                                                                                                                                                                                                                                                                                                                                                    2601
                                                                                                                                                                                                                                                                                                                                           2721
                                                                                                                                                                                                                                        2541
                                                                                                                                                                                                      2481
                                                                                                                                    2361
                                                                                                                                                                     2421
                                                                                                                                                                                                                                                                                          965
                                                                 2241
                                                                                                 2301
                                                                                                                                                                                                                        845
                                                                                                                                                     725
                                                                                                                                                                                       785
                                                 545
                                                                                   605
                                                                                                                    665
                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGTTGAAGGAATTTAT
                                                                                                                                                                                                                                                                                                                                                                                                     2842 TGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGTTGAAGGAATTTAT
                                                                                                                                                                                                                                                                                                                          906 GICTACCCGGCACTACAGAGCTCCCGGAGGTCATTTTGGCTTTAGGTTGGTCTCAGCCTTG
2602 GICTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTTGGTCTCAGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                            1086 ACACATGATTCAGAAAACAGAAAAAGGCAAGTATTTTCACCATAACCAGCTAGATTGGGA
                                                                                                                                                                                                                                                        2302 GTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACAGCTTTCTGCCATT
                                                                                                                                                    CTATGTAGTCAAATATAAATTGTAAATGAAAGGTGATGAAGGCACACTGAAAAACACAGA
                                                                                                                                                                                                                                 2482 CTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGAACGCACACTGAAAAACAGAGA
                                                 AGATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGTGCATTGA
                                                                                           GTTTGAACTACTGGGACTTAGTACTTAGGATTTCATTAAAGAAAACAGCTTTCTGCCATT
                         TGTCTTCCGATGTGCCAGATGCTAGAATGGTTTGATCATCATGGTCATGTTTGTATTGT
                 TCATGGCATGGATGCATGCAGTGAAAATCGTAAAAATGTAGCGCCGTTACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
2.10-425-114-26852
Sequence 26852, Application US/10425114
Sequence 10852, US2040034888A1
Publication No. US2040034888A1
GENERAL INFORMATION:
APPLICANT: Liu, Jingdong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1326 AAAAAAGAAA 1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3022 AAAAAAGAAA 3031
                                                                                                                                                                                                              2422
                                                                                                                                                                                              726
                                                                                                                                                                                                                                786
        2062
                        426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                           유
장
                                                                                                                          8 8 8
                                                                                                                                                                          8 8 8
                                                                                                                                                                                                                               ò
                                                                                          9 g
                                                                        ద
                       ઠે
                                      ద
                                                     8
                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       425
                                                                                                                                                                                                                                                                                                             1498
                                                                                                                                                                                                                                                            1252
                                                                                                                                                                                                                                                                     GAATGITAGAAIAIGAICCAACTCAAAGAAITACCITGGAIGAAGCAITGCAGCAICCII 1312
                                                                                                                                                        1072
                                                                                                                                                                 1132
                                                                                                                                                                                                  AGCTAGATTGGGATGAACACAGTTCTGGTGGTAGATATGTTAGGAGACGGTGCAAACCGT 1192
                                                                                                                       GGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTT 1012
                                                                                                                                        1198
                                                                                    ACAGTACTTTGGTGTTGCCGGCACTACAGAGGTCCCGAGGTCATTTTGGCTTTAGGTT 952
                                                            1019 TGABABACACAGATATCABAGTTGTTGTTTTGGAAGTGCAACATATGACGACGAACATC 1078
                                    1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      366 ATATGAAATCCTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGTGCATTGA
                                                                                                                                                                                                                                                                                                     TGAAGGAATTTATGCCTTTGTCATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAA
                                                                                                                                  TCACAGTCTTTCAGACTCATGATAGTAAAGGAGCACCTGGCAATGATGGAACGAATATTAG
                                                                                                                                                                                         GACCCATACCACACACATGATTCAGAAAACAAGAAAACGCAAGTATTTCACCATAACC
                                                                                                                                                                                                                                    TTGTGAAGTCTGACTATGTAGTCAAATATATATTGAAATGAAACGTGATGAACGCACAC
                              833 IGAAAAACGAGAIBICAAAGITGITGACTITGGAAGIGCAACGIAIGAIGAIGAACAIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     72.5%; Score 968.4; DB 18; Length 3040; 99.9%; Pred. No. 8.5e-258; tive 0; Mismatches 1; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; CTHER INFORMATION: Clone ID: LIB4115-001-H8_FLI
US-10-425-114-26212
                                                                                                                                                                                                                                                                                                                                  TCTTTGACTTATTAAAAAAAAA 1335
                                                                                                                                                                                                                                                                                                                                             72.54
Best Local Similarity 99.94
Matches 969; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                               RESULT 9
US-10-425-114-26212
                                                                                                                                                                                                                                                                                                                                     1313
                                                                                                                                                                                                                 1259 (
                                                                                                                                                                                                                                                  1319
                                                                                                                                                                                                                                                                   1193
                                                                                                                                                                                                                                                                                   1379
                                                                                                                                                                                                                                                                                                    1253
                                                                                                                                                                                                                                  1133
                                                                                                                                                                1013
                                                                                              893
                                                                                                             1079
                                                                                                                                              1139
                                                                                                                                                                                1199
                                                                                                                                                                                                 1073
                                                                                                                               953
                           773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
```

셤 ò

ò

g ò 셤 ઠે g

6 8 6 8 6

\$ g

8 8

σ

```
GCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAAGAATGTTAGAATA 1265
                                                                                                                                  2966 GCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAAGAAGTTAGAATA 3025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATCAGTACAGAAATGACTACACTCAAGGATGTGAACCTGGACATCGCCAAAGAGACCAT 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            280 GAAAGCCGGTATCAGAACCATAGTAGCAAGTCTTCTGGTAGAAGTGGAAGAAGTAGTTAT 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAGGAAGCGCAATAGACAC----TGTTCAAGTCATCAGTCACGTTCGAAGAGCCAC 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    340 AAAAGCAAACACAGGATTCACCACAGTACTTCACATCGTCGTTCACATGGGAAGAGTCAC 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGAAGGAAAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAGT 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       346 GGAGACGTTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGC 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGTTGTAGAGTGCATTGATCATGGCATGGATGCATGTAGCAGTGAAAATCGTA 465
          2846 ACACATGATTCAGAAAACAAGAAAACGCAAGTATTTTCACCATAACCAGCTAGATTGGGA
                                                                2906 TGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGTTGAAGGAATTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            160 AGCCATTATTGGAAAGCAGGTCTATAAATGAGAAAGATTATCATAGTCGACGCTACATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAGACCTACTAAGTGCAAGATATGAAATTGTTGATACTTTAGGTGAAGGAGCTTTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACGAATACAGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAGAAGCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   52 AGTCATTATTTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 18; Length 1455;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 60.9%; Score 813.2; DB 18; Best Local Similarity 77.6%; Pred. No. 7.5e-215; Matches 999; Conservative 0; Mismatches 283;
                                                                                                                                                                                                                                                                                                                                                                 Sequence 136, Application US/10267502
Publication No. US20040071700A1
GENERAL INFORMATION:
APPLICANT: Kim, Jaeseob
APPLICANT: Kim, Jaeseob
TITLE OF INVENTION: Obesity Linked Genes
FILE REFERENCE: LSD-07416
CURRENT APPLICATION NUMBER: US/10/267,502
CURRENT PILING DATE: 2003-01-27
NUMBER OF SEQ ID NOS: 439
SOFTWARE: PatentIn version 3.2
SEQ ID NO 136
LENGTH: 1455
                                                                                                                                                                                                                                                   AAAAAAGAAA 1335
                                                                                                                                                                                                                                                                                       AAAAAAGAAA 3095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   , ORGANISM: Homo sapiens
US-10-267-502-136
                                                                                                                                                                                                                                                                                                                                                          -10-267-502-136
                                                                                                                                                                                                                   3026
                                              1146
                                                                                                               1206
                                                                                                                                                                                   1266
                                                                                                                                                                                                                                                     1326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             406
                                                                                                                                                                                                                                                                                       3086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                          g
                                                                                                                                                                                                            g
                                         ò
                                                                8 8
                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
APPLICANT: Zhou, Yihua
APPLICANT: Kovalic, David K.
APPLICANT: Screen, Steven E
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REPERENCE: 38-21(53313)8
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128
SEQ ID NOS: 73128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACACATGATTCAGAAAACAAGAAACGCAAGTATTTCACCATAACCAGCTAGATTGGGA 1145
                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAATAAATTTTTTACA 2485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAGGACCCATACCACA 1085
                                                                                                                                                                                                                                                                                                                                                                                                                                AGATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGGTGCATTGA 2185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTTTCACAGTCTTTCA 1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAGGACCCATACCACA 2845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCATAATAAATTAACCCATACAGATCTGAAGCCTGAAAATATTTTGTTTTGTGAAGTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCATGGCATGGCATGCATGTAGCAGTGAAAATCGTAAAAAATGTAGGCCGTTACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCATGGCATGGCATGCATGTAGCAGTGAAAATCGTAAAAAATGTAGGCCGTTACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGAAGCAGCTCGTTCAGAATCCAAGTATTAGAGCACTTAAATAGTACTGATCCCAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAACAGCTTTCTGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGAACATCACAGTACTTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTTGGTCTCAGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTTGTCAGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                            366 ATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGTGCATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAAATAGTACTGATCCCAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTCTTCCGATGTCTCCAGATGCTTTGATCATCATCATCATGGTCATGTTTGTATTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACAGCTTTCTGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCATAATAAATTAACCCATACAGATCTGAAGCCTGAAAATATTTTGTTGTGAAGTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGAACATCACAGTACTTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rgargringgagcaraggringcarrcriarrgaararraccriggrincacagrcrinca
                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                          Length 4035;
                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                        Query Match 72.5%; Score 968.4; DB 18; Length Best Local Similarity 99.9%; Pred. No. 1e-257; Matches 969; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Clone ID: LIB4654-056-G4_FLI
                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                       US-10-425-114-26852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        906
                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ያ ያ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
```

111 219 171 231

459

519

ä

285

554

494

231 434

345

405 674 465 734 525 794

ઠ g 8 8 8

```
GAACATCACAGTACTTTGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCT 945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTAGGTTGGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTAC 1005
                                                                                                                                                                                                                                                                                                                                                                                          374
                                                                                              171
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATGGTCATGTTTGTATTGTACTGGGACTTAGTACTACGATTTCATTAAA
                                                                                                                                                                                                                                                                                                                                                               GAAAACAGCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGC
                                                                                                                                                                                                                                                                         AAAAATGTAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTA
                                                                                                                                                                                                                                                                                 AAAGITGIAGAGIGCAITGATCAIGGCAIGGAIGGCAIGCAIGIAGCAGIGAAAAICGIA
                                                                                                                                                                                                                                                    AATAGTACTGATCCCAATAGTGTCTTCCGATGTGCCAGATGCTAGAATGGTTTGATCAT
                                                                                                                                                        AAAAGGAAGGGCAATAGACAC----TGTTCAAGTCATCAGTTCGAAGAGCCAC
                                                                                                                                                                CGAAGGAAAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAGT
                                                                                                                                                                                                                 ggagacgtictaagagcaagatatgaaatcgtggacacttigggtgaaggagcctitggc
                                                                                             GACGAATACAGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATT
                                                                                                                                                                                           AGTCATTATTTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTT
                                                     Gaps
                                                     . 9
                                      Length 1834;
                                                     Indels
                                      tch 60.7%; Score 810; DB 17; al Similarity 77.4%; Pred. No. 6.6e-214; 997; Conservative 0; Mismatches 285;
      FEATURE:
NAMB/KEY: CDS
LOCATION: (156)...(1610)
US-10-154-708-3
                                                                                                                                                                                                                                                                                                                                                                    646 (
                                                                                                                                                                                                                                                                                                                                                                                                                                           1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                         826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   946
                                                                                                                                                                                                                                                                                                                                                                                                                              991
                                         Query Match
Best Local Si
Matches 997;
                                                                                                                                                                                                                                                                675
                                                                                                                                                                                                                                                                                            735
                                                                                                                                                                                                                                                                                                           526
                                                                                                                                                                                                                                                                                                                         795
                                                                                                                                                                                                                                                                                                                                        586
                                                                                                                                                                                                                                   615
                                                                                                                                                                                                                                                  406
                                                                                                                                                                                                                                                                              466
                                                                                                                                                                          495
                                                                                                                                                                                                       555
                                                                                                                                                                                                                     346
                                                                       25
                                                                                     315
                                                                                                   112
                                                                                                                 375
                                                                                                                                              135
                                                                                                                                                            232
                                                                                                                                                                                         286
                                                                                                                                172
FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                             8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                       임
                                                                                                                                                                                                   6 6 6
                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                       g &
                                                                                                              6 6 6 6
                                                                       ò
                                                                                  셤
                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                 GTTCGAAGAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAG 1305
                                                                                                                                                                                                                                                                                                                                                                              1419
                                                                                                                                                                                                              TTAGGTTGGTCTCAGCCTTGTGANGTTTGGAGCATAGGTTGCATTCTTATTGAATATTAC 1005
                                                                                                                                                                                                                                                                         1125
                                                                                                                                                                                                                                                                                                             CITGGITTCACAGICTTTCAGACTCATGATAGTAAGAGCACCTGGCAATGATGGAAGGA 1065
                                                                                                                                                                                                                                                    765
                                                                                                            879
                                                                                                                           825
                                                                                                                                         939
                                                                                                                                                      CGCACACTGAAAAACACAGATATCAAAGTTGTTGACTTTGGAAGTCCAACGTATGATGAT 885
                                                                                                                                                                     999
                                                                                                                                                                                    945
                                                                               819
                                    645
                                                   759
                                                                 705
                       669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                        ATATTAGGACCCATACCACAACACATGATTCAGAAAACAAGAAAACGCAAGTATTTTCAC
                                                                                                                                                                                                                                                                                 CATAACCAGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGC
                                                                                                       ATTITGITGAAGTCTGACTATGTAGTCAAATATAAATTCTAAAATGAAACGTGATGAA
                                                                                                                                   GAACATCACAGTACTTTGGTGTGTTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCT
                                    CAGTCAATAAATTTTTTACATCATAATAAAATTAACCCATACAGATCTGAAGCCTGAAAAT
                                                                 GAAAACAGCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGC
         AATAGTACTGATCCCAATAGTGTCTTCCGATGTGTCCAGATGCTAGAATGGTTTGATCAT
                 CDC-LIKE KINASE 1
                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT FILING DATE: 2002-05-22

TITLE OF INVENTION NOMBER: US/10154708

Publication No. US20030219895A1

GENERAL INFORMATION: Watt

TITLE OF INVENTION: AMTISENSE MODULATION OF FILE REPRENEUR: RTS-0213

CURRENT APPLICATION NUMBER: US/10/154,708

CURRENT FILING DATE: 2002-05-22

NUMBER OF SEQ ID NOS: 143

SEQ ID NO 3

LENGTH: 1834
                                                                                                                                                                                                                                                                                                                                                                                              CATCCTTTCTTTGACTTATAAAAAGA 1333
                                                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: H. sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                          10-154-708-3
                                                                                                                                                                                                                                                                                                                                                                                                1306
                                                                                                                                                                                                                                                                                                                                                                                                              1420
                                                                                                                                                                                                                                                               1120
                                                                                                                                                                                                                                                                                                                        1240
                                                                                                                                                                                                                                                                                                                                                     1300
                                                                                                                                                                                                                                                 1006
                                                                                                                                                                                                                                                                              1066
                                                                                                                                                                                                                                                                                            1180
                                                                                                                                                                                                                                                                                                          1126
                                                                                                                                                                                                                                                                                                                                       1186
                                                                                                                                                                                                                                                                                                                                                                    1246
                                                                                                                                                                                                      1000
                                                                                                                                                                                                                                   1060
                                                                                    160
                                                                                                                                                                                                                     946
                                                                                                                820
                                                                                                                                                                          940
                                                                                                                                                                                        886
                                                      700
                                                                     646
                                                                                                   904
                                                                                                                                994
                                                                                                                                              880
                                                                                                                                                           826
                                         286
                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                     8 &
                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                   8 &
                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                   8 6
                                                                                 ద
```

1154 885

825

914

645

585 854 705

6 8 6

6 6 6 6 6 6 6

셤

```
1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1185
                                                                                                                                                                                                                                                                                                                                                                                                                          CTTGGGTTTACCGTATTTCCAACACACACAGATGATAGTAAGGAGCATTTAGCAATGATGGAAAGG 1334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1186 AAACCGTTGAAGGAATTATGCTTTGTCATGAAGAACATGAGAAACTGTTTGACCTG 1245
                                                                                                                                                                                                                                                                                                                                                                                                   1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTAGGTTGGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATAC 1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTGGTTTCACAGTCTTTCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGA 1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTTCGAAGAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAG 1305
                                                                                                                                                                                                                                                                                                                                   975 AAGTCTGTGAATTTTTTGCACAGTAATAAGTTGACTCACACAGACTTAAAGCCTGAAAAC 1034
                                                                                                                                                                                                                                                                                                                                                                         825
                                                                                                                                                                                                                                                                705
                                                                                                                                                                                                                                                                                          974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       405
                                                    465
                                                                  AAAGTTGTGGGAGTGCATCGATCATAAAGCGGGGGGGGAGATGTTAGCAGTAAAAATAGTT 734
                                                                                                       525
                                                                                                                                                          585
                                                                                                                                                                                                              645
                                                                                                                                                                                                                                       914
                                                                                                                                                                                                                                                                                                                      CAGTCAATAAATTTTTACATCATAATTAACCCATACAGATCTGAAGCCTGAAAAT 765
                       674
                                                                                                                                794
                                                                                                                                                                                   854
                                                                                                                     GAAAATGGTTTTCTACCATTTCGACTGGATCATATCAGAAAGATGGCATATCAGATATGC
                                                                                                                                                                                                                                                                                                                                                                                            ATTCTTGGACCTCTACCAAAACATATGATACAGAAAACCAGGAAACGTAAATATTTTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATAACCAGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATAGTACTGATCCCAATAGTGTCTTCCCGATGTCTCCAGATGCTTTGATCAT
                                                                                                                                                                         CATGGTCATGTTTGTATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAA
                                                                                                                                                                                                                            CATGGTCACATTTGCATTGTTTTTTGAACTATTGGGACTTAGTACTAGTACTTAAA
                                                                                                                                                                                                                                                                 GAAAACAGCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGC
                                                                                                                                                                                                                                                                                                                                                                         ATTTTGTTTGTGAAGTCTGACTATGTGAAATATAATTCTAAAATGAAACGTGATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1066 ATATTAGGACCCATACCACACACACATGATTCAGAAAACAAGAAAAGGCAAGTATTTTCAC
GGAGACGTACTAAGTGCAAGATATGAAATTGTTGATACTTTAGGTGAAGGAGCTTTTGGA
                                                AAAGTTGTAGAGTGCATTGATCATGGCATGGATGCATGTAGCAGTGAAAATCGTA
                                                                                                       AAAAATGTAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATCCTTTCTTTGACTTATTAAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  , Sequence 1175, Application US/10956157; Publication No. US20050118625A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-956-157-1175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1455
                           615
                                                                             675
                                                                                                                                 735
                                                                                                                                                           526
                                                                                                                                                                                    795
                                                                                                                                                                                                              586
                                                                                                                                                                                                                                        855
                                                                                                                                                                                                                                                                 646
                                                                                                                                                                                                                                                                                           915
                                                                                                                                                                                                                                                                                                                      902
                                                                                                                                                                                                                                                                                                                                                                          994
                                                                                                                                                                                                                                                                                                                                                                                                   1035
                                                                                                                                                                                                                                                                                                                                                                                                                             826
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1575
  346
                                                   406
                                                                                                       466
                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                            8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               중
음
중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
 ò
                   음 승 음
                                                                                             ે
                                                                                                                         8 & 8
                                                                                                                                                                                                         $ B &
                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                      8 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                             NF-kB
                                                                                                                                                                                                                                                                                                                                                                     ; Sequence 1, Application US/10755889; Bellication No. US20040171823A1; Bellication No. US20040171823A1; Bublication No. US20040171823A1; Bublication No. US20040171823A1; Publication No. US2004017182A1]; APPLICANT: Bristol-Myers Squibb Company; TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES ASSOCIATED WITH THE NF-kE; TITLE OF INVENTION: PATHWAY; FILE OF INVENTION: PATHWAY; FILE OF INVENTION NUMBER: US. 10/40,068; PRIOR PILING DATE: 2003-01-14; PRIOR PILING DATE: 2003-01-14; PRIOR PILING DATE: 2003-01-14; PRIOR FILING DATE: 2003-01-12; NUMBER OF SEQ ID NOS: 823; SEQ ID NO: 823; SEQ ID NO: LENGTH: 1834
                                                                                                                                                                     CTTGGTTTCACAGTCTTTCAGACTCATGATAAAGAGCACCTGGCAATGATGGAACGA 1065
                                                              CATAACCAGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGC 1185
                                                                                                                                  GTTCGAAGAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAG 1305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGAAGGAAAGAACCAGGAGTGTAGAGGATGATGAGGAGGGTCACCTGATCTGTCAGAGT 614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAAGCCGGTATCAGAACCATAGTAGCAAGTCTTCTGGTAGAAGTAGAAGTAGTTAT 494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTCAGAAAATGTTGGAGTATGATCCAGCCAAAAGAATTACTCTCAGAGAAGCCTTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACGAATACAGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATGAGTACAGAATGACTACACTCAAGGATGTGAACCTGGACATCGCCAAAGAGACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTCATTATTTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAGAAGCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAAGGAAGCGCAATAGACAC----TGTTCAAGTCATCAGTCACGTTCGAAGAGCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGAAGGAAAAGATCCAGGAGTATAGAGGATGAGGAGGGTCACCTGATCTGTCAAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60.7%; Score 810; DB 19; Length 1834;
larity 77.4%; Pred. No. 6.6e-214;
Conservative 0; Mismatches 285; Indels 6
                                                                                                                                                                                                                                                                            ORGANISM: Homo Bapiens
US-10-755-889-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   al Similarity
997; Conserv
                                                                                                                                                                                                                                                                                                                                                          US-10-755-889-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S:
Matches 997
                                                                                                                                                                                                                                                    1515
                                     1275
                                                                1066
                                                                                        1335
                                                                                                                  1126
                                                                                                                                            1395
                                                                                                                                                                      1186
                                                                                                                                                                                                 1455
                                                                                                                                                                                                                           1246
                                                                                                                                                                                                                                                                              1306
                                                                                                                                                                                                                                                                                                       1575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 172
```

셤

ઠે

```
7
                                                                                                                                                                                                                                                                                                                                                                                     AAACCGTTGAAGGAATTTATGCTTTGTCATGAAGAACATGAGAAACTGTTTGACCTG 1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGACGAATACAGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACAT 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGAAAGCGGGTATCGAATCCACTAAATCTTCAGTCCGCAGCAGGAGAAGCAGTCC 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ricakaickaankeckaakisckatakakakakatecrerideraksakirdakakakakakataka 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 284
                                                                                                                                                                                                                                                                                                                     CATAACCAGCTAGATTGGGATGAACACAGTTGTGGTAGATATGTTAGGAGACGCTGC 1185
                                                                                                                                                                                                                                                                                                                                                                                                          TTAGGTTGGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTAC 1005
                                                                                                                                                                                                         ATTCTTGGAACCTCTACCAAAACATATGATACAGAAAACCAGGAAACGTAAATATTTTCAC 1394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rgargaaracaggaargactacarg---ggcracgagccagggcarccrargagaacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TABARGGARGGCAATAG-----ACACTGTTCAAGTCATCAGTCACTCACGTTCGAAGAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cagcraftarcragaaagcagarccaraaargagaaagcrafarcaragrcgacgcrargr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             51 CAGTCATTATTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGT
                                                                             GAACATCACAGTACATTGGTATCTACAAGACATTATAGAGCACCTGAAGTTATTTAGCC
                                                                                                                                          1246 GITCGAAGAATGITAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAG
                                                                                                                                                                                    CTTGGTTTCACAGTCTTTCAGACTCATGATAAAGAGCACCTGGCAATGATGGAACGA
                                                                                                                                                                                                                                                      ATATTAGGACCCATACCACAACACCATGATTCAGAAAACAAGAAAACGCAAGTATTTTCAC
                                                                                                                                                                                                                                                                                                                                                     caccarroarradacroadardadacacadricroccoscadaratorrocadadocoror
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1452;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 768.8; DB 18;
Pred. No. 1.6e-202;
0; Mismatches 302;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 139, Application US/10267502
; Sequence 139, Application US/10267502
; PUBLICATION NO. US20040071700A1
; GENERAL INFORMATION:
; APPLICANT Kim, Jaeseob
; APPLICANT Kim, Jaeseob
; TITLE OF INVENTION: Obssity Linked Genes
; TITLE OF INVENTION: Obssity Linked Genes
; CURRENT APPLICATION NUMBER: US/10/267,502
; CURRENT FILING DATE: 2003-01-27
; NUMBER OF SEQ ID NOS: 439
; SEQ ID NOS: 439
; SEQ ID NO 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATCCTTTCTTTGACTTATAAAAAGA 1333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 75.9%;
Matches 979; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: DNA
; ORGANISM: Mus musculus
US-10-267-502-139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 15
US-10-267-502-139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1306
                                                                                                                                                                                                                                                                                                                                                                                                 1186
                                                                                                                                                                                                                                                                                              1335
                                                                                                                                                                                               1006
                                                                                                                                                                                                                               1275
                                                                                                                                                                                                                                                              1066
                                                                                                                                                                                                                                                                                                                                1126
                                                                                                                                                                                                                                                                                                                                                                1395
                                                                                                                               946
                                                          988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                    g
                                                                                                                                                                                8 6 8 6
                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                      g
                                                                                                                           8
                                                     ò
                                   APPLICANT: Wyeth
APPLICANT: Wyeth
APPLICANT: Wounte, William
APPLICANT: Mounte, William
TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES
FILE REFERENCE: 031896-043000 (AM 101081)
CURRENT APPLICATION NUMBER: US/10/956,157
CURRENT FILING DATE: 2004-10-04
NUMBER OF SEQ ID NOS: 319805
SOFTWARE: PALCELIN Version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGCACACTGAAAAACACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGAT 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              766 ATTTTGTTTGTGAAGTCTGACTATGTAGTCAAATATAATTGTAAAATGAAACGTGATGAA 825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATGGTCATGTTTTGTATTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAA 645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAAACAGCTITCTGCCATTTCAAAITGACCACATCAGGCAGATGGCGTATCAGATCTGC 705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAAATGGTTTTCTACCATTTCGACTGGATCATATCAGAAAGATGGCATATCAGATATGC 974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             706 CAGTCAATAATTTTTTACATCATAATAAATTAACCCATACAGATCTGAAGCCTGAAAAT 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAAATGTAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTA 525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGTTGTAGAGTGCATTGATCATGGCATGGCATGCATGTAGCAGTGAAAATCGTA 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAGTIGIGGAGGGGATCATAAAGCGGGAGGTAGACATGTAGCAGTAAAATAGTT 734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      aaaaarigirgaragaraktrereaaagerektekeerekaaarakaagireregaaktere 794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGAAGGAAAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAGT 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       674
                                                                                                                                                                                                                                                                                                                                                     111
                                                                                                                                                                                                                                                                                                                                                                                   374
                                                                                                                                                                                                                                                                                                                                                                                                                   171
                                                                                                                                                                                                                                                                                                                                                                                                                                                     434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAAGCCGGTATCAGAACCATAGTAGCAAGTCTTCTGGTAGAAGTGGAAGAAGTAGTAGTAGT 494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAAGGAAGCGCAATAGACAC-----TGTTCAAGTCATCAGTCACGTTCGAAGAGCCAC 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    adadecadacacacatricaccacacacatricacaticatricacaticacaticacada ssa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1035 Arcitatiticiscacicicactacacacacecetataatcccaaaataaaccicataa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATAGTACTGAATAGTGTCTTCCGATGTGTCCAGATGCTAGAATGGTTTGATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGAGACGTTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACGAATACAGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATT
                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAAAGCAGTCCT
                                                                                                                                                                                                                                                                                                                                                  52 AGTCATTATTTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTT
                                                                                                                                                                                                                                                                                                                                                                                 315 AGCCATTATTTGGAAAGCAGGTCTATAAATGAGAAAGATTATCATAGTCGACGCTACATT
                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                  Length 1834;
                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                    Score 810; DB 21;
Pred. No. 6.6e-214;
0; Mismatches 285;
                                                                                                                                                                                                                                                                                     Match 60.7%;
Local Similarity 77.4%;
les 997; Conservative
                                                                                                                                                                                                                                         , ORGANISM: Homo sapiens
US-10-956-157-1175
                     SENERAL INFORMATION:
                                                                                                                                                                                         SEQ ID NO 1175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                615 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                346
                                                                                                                                                                                                                                                                                                                                                                                                                                                            375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                286
                                                                                                                                                                                                                                                                                         Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                            112
```

6 6 6 6 6 6

g

셤 ð

8

8 6 8

8 8 ò

8 S g õ g ò

ò 임

4, 2005, 01:51:10

Search completed: August Job time : 865.014 secs

음 중 음

6 6 6

8686

```
TTTAGGTTGGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTA 1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATTGGGAAAATGTTGGAGTATGATCCCGCCAAAAGAATTACTCTCAAAGAAGCCCTAAA 1415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1116 TCTTGGATTTACAGTTTTTCCGACTCATGATAGCAGGGAACATTTAGCAATGATGAAAG 1175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATTCTTGGACCACTACCAAAGCACATGATACAGAAAACCAGGAAACGCAGATATTTCCA 1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAAACCGTTGAAGGAATTTATGCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCT 1244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1245 GGTTCGAAGAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCA 1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTTGGTTTCACAGICTTTCAGACTCATGATAGAGAGCACCTGGCAATGATGGAACG 1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATCTTATTTGTGAAGGTCTACACAGAGGCTTATAATCCCAAAATGAAACGTGATGA 935
                                                                  CCGAAGGAAAAGATCGAGGAGTGTAGAGGATGATGAGGAGGGTCACCTGATCTGTCAGAG 455
                                                                                                                         TGGAGACGTTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGG 404
                                                                                                                                                                                                               464
                                                                                                                                                                                                                                                       575
                                                                                                                                                                                                                                                                                                 524
                                                                                                                                                                                                                                                                                                                                        635
                                                                                                                                                                                                                                                                                                                                                                                                        GAATACAACAGACCCCCATAGTACTTTCCGTTGTGTCCAGATGTTGGAGTGGTTTGAGCA 695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               825 ACGCACACTGAAAAACACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGA 884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACGTACTATAGTAAATCCAGATATTAAAGTGGTGGACTTTGGAAGTGCAACATATGATGA 995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGAACATCACAGTACTTTGGTGTCTACCGGGCACTACAGAGCTCCCGAGGTCATTTTGGC 944
CAAAAGTAAACACAGGAGTCGCCACCACCACTCGCAGCACCATTCACACGGGAAGAGTCA 395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAGTCAATAAATTTTTACATCATAATAAATTAACCCATACAGATCTGAAGCCTGAAAA 764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                765 TATTTTGTTTGTAGAGTCTGACTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGA 824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGAAAACAGCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTG 704
                                                                                                                                                                                                                                                                                              AAAAAATGTAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u> aaaagregregaarecarecarearaagregeaegragaegregrageagraaaaaragr</u>
                                                                                                                                                                                                                                                                                                                                        TAAAAATGTGGATAGATACTGTGAAGCTGCTCAATCGGAAATACAAGTTTTGGAACACTT
                                            CCGAAGGAAAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAG
                                                                                                                                                                                                               CAAAGTTGTAGAGTGCATTGATCATGCATGGATGCCATGTAGCAGTGAAAATCGT
                                                                                                                                                                                                                                                                                                                                                                                AAATAGTACTGATCCCAATAGTGTCTTCCGATGTCTCCAGATGCTAGAATGGTTTGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATATTAGGACCCATACCACAACAACATCAGAAAACAAGAAAACGCAAGTATTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCATCCTTTTTACCCACTTAAAAAGCA 1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCATCCTTTCTTTGACTTATTAAAAAGAA 1334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1185
                                                                                                                                                                                                                                                                                                                                        276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1416
                                            285
                                                                                 396
                                                                                                                           345
                                                                                                                                                                     456
                                                                                                                                                                                                               405
                                                                                                                                                                                                                                                       516
                                                                                                                                                                                                                                                                                                 465
                                                                                                                                                                                                                                                                                                                                                                                                                          969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           966
```

셤

ò

8 6

8 8

셤

ઠે

ઠે

영양

g

8 6

8 6 8 6 8 6 8 6

6 8 6

## THIS PAGE BLANK (USPTO)

```
CGCAATAGACACTGTTCAAGTCATCACGTTCGAAGAGCCCACCGAAGGAAAAGATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGCAATAGACACTCTTCATCATCACTCACGTTCGAAGAGCCACCGAAGGAAAAGATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGAGTATAGAGGATGATGAGGAGGTCACCTGATCTGTCAAGAGTGGAGACGTTCTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
CRGANISM: Human
US-09-810-671-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 2354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-810-671-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1, Appli
1, Appli
1, Appli
26, Appl
9, Appli
238, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1439, Ap
2648, Ap
2649, Ap
313, App
699, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           712, App
3125, Ap
3125, Ap
3124, Ap
1, Appli
1, Appli
1, Appli
3, Appli
3, Appli
3, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Appli
Appli
Appli
                                                                                                                                                          (without alignments)
9830.985 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                      1 atgtgcatccctcttgaagc......ttgacttattaaaaagaaa 1335
                                                                                                                                     3, 2005, 12:45:04; Search time 222.198 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                seduence sed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Issued Patents NA:*

(cgn2_6/ptodata/1/ina/5A_COMB.seq:*
(cgn2_6/ptodata/1/ina/5B_COMB.seq:*
(cgn2_6/ptodata/1/ina/6A_COMB.seq:*
(cgn2_6/ptodata/1/ina/6B_COMB.seq:*
(cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
(cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
version 5.1.6
- 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-810-671-1

US-10-109-854-1

US-10-339-656-1

US-09-905-999-26

US-09-919-238

US-09-905-999-23

US-09-905-999-24

US-09-905-999-24

US-09-905-999-24

US-09-905-999-24

US-09-905-999-24

US-09-905-999-24

US-09-905-999-24

US-09-905-999-24

US-09-913-913-96-99

US-09-016-434-313

US-09-016-434-313

US-10-339-656-3

US-10-339-656-3

US-10-339-656-3

US-10-339-656-3

US-09-621-976-3125

US-09-621-976-3125

US-09-621-976-3125

US-09-621-976-3125

US-09-621-976-3125

US-09-351-170-1

US-09-371-674-1

US-09-371-674-3

US-09-371-674-3
                                                                                                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                     residues
                                                                                                                                                                                                                      US-10-801-671-1_COPY_33_1367
1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                       nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                   1202784 seqs, 818138359
                                                                                                                                                                                                                                                                                                              IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
      GenCore
(c) 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2354
2354
2354
22554
2254
22554
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
11763
1176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                           Copyright
                                                                                                                                     August
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          seq
seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        88
                                                                                         OM nucleic
                                                                                                                                                                                                                                                                         Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Minimum I
Maximum I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                                                                     ë
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Run
```

```
Sequence 1, Application US/09810671
Sequence 1, Application US/09810671
Patent No. 645521
GENERAL INFORMATION:
APPLICANT: YAN, Chunhua et al
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
FILE REPERBNCE: CLOO0758
CURRENT FILING DATE: 2001-06-08
NUMBER OF SEQ ID NOS: 5
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               272
      4385, Ap
9631, Ap
2299, Ap
15390, Ap
1168, Ap
1118, Ap
11373, A
                                                                                                                                                                                                                                                                                                           14391, A
1, Appli
1, Appli
1, Appli
1, Appli
3, Appli
3, Appli
14, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTGACGAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTGACGAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTGAAAGCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGAAGCAGTCCTAAAAGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAGAAGCAGCAGCAGTCCTAAAAGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
      Sequence
Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indela
US-09-248-796A-4385
US-09-621-976-9631
US-09-913-294A-229
US-09-913-294A-1168
US-09-9131-294A-1168
US-09-614-221A-518
US-09-513-999C-11373
US-09-513-999C-11373
US-09-513-999C-11373
US-09-919-016-14390
US-09-949-016-14391
US-09-149-588-1
US-09-149-588-3
US-10-135-687-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        i; Score 1335; [
i; Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
ilarity 100.0%;
Conservative 0
         Query Match
Best Local Similarity
Matches 1335; Conserv
```

```
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
FILE REFERENCE: CLOGOTSBILD
CURRENT APPLICATION NUMBER: US/10/109,854
CURRENT FILING DATE: 2002-04-01
PRIOR FILING DATE: 2000-08-24
PRIOR FILING DATE: 2000-08-24
PRIOR FILING DATE: 2000-08-24
PRIOR FILING DATE: 2001-03-19
RIOR FILING DATE: 2001-03-19
                                                                                                                                                                               TTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTGACGAATAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTGTGTTTGAACTACTGGGACTTAGTACTTTACGATTTCATTAAAGAAAACAGCTTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCATTICAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAATAAATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTGATCATGGCATGGCATGCATGTAGCAGTGAAAATGGTAAAAATGTAGGCCGT
                                                                                                                                                                                                                                                                                                                                                        AGGAGTATAGAGGATGAGGAGGGTCACCTGATCTGTCAAAGTGGAGACGTTCTAAGA
                                                                                                                                                     AGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTGAAAGCGGG
                                                                                                                                                                                                                  0; Indels
                                                                                                                              DB 4;
                                                                                                                           Query Match
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1335; Conservative 0; Mismatches
                                                                                                     TYPE: DNA
CORGANISM: Homo sapien
US-10-109-854-1
                                                                                                                                                                                                                                                                                                                                                                   453
                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                             513
                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                        573
                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                   633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                             333
                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                       213
                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                 273
                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                    61
                                                                                                                                                                                                                121
                                                                                                                                                                                                                                           181
                                                                                                                                                                                                  93
                                                                                                                                                                       33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                 ठे
                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                          음
장
음
                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                     g
                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                     ઠે
                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                 1352
                                                                                                                                                                                                                                                                                                                1112
                                                                                                                                                                                                                                                                                                                            regearcacacrecrecrecregracararerrageacacecrecaaaccerreaageaa 1200
                                                                                                                                                                                                                                                                                                                                                              1020
                                                                                                                                                                                                                                                                             960
                                                                                                                                                                                                                                                         992
                                                                                                                                                                                                                 ACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGAACATCACAGTACT 900
                                                                                                                                                                                                                               932
                                                                                                       099
                                                                                                                   692
                                                                                                                                720
                                                                                                                                              752
                                                                                                                                                            780
                                                                                                                                                                   840
                                                                                                                                                                                                    872
                                                                            900
                                                                                         632
                                                 540
                                                              572
                     480
                                   512
                                                                                                                                                                                                                                                                                                                                                                                                                   CCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTTTCACAGTC
                                                                                                                                                                                                                                                                                                 TITCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAGGACCCATA
                                                                                                     CCATTTCAAATTGACCACATCAGGCAGATGGCCGTATCAGATCTGCCAGTCAATAATTTT
                                                                                                                                        TCTGACTATGTAGTCAAATATATTCTAAAATGAAACGTGATGAAGCGCACACTGAAAAAC
                                                 TACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTACTGATCCC
                                                                                   AATAGTGTCTTCCGATGTGCTAGATGCTTTGATCATCATCATGGTTTGT
                                                        GCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGTGC
                             US-10-109-854-1
; Sequence 1, Application US/10109854
; Patent No. 6630337
; GENERAL INFORMATION:
; APPLICANT: YAN, Chunhua et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                          TTATTAAAAAAGAAA 1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTATTAAAAAAGAAA 1367
                                                                                                                                                                                                                                                                                                                                                                                                                 1261
                                                                                                                                                                                                                                                                                                                                                                                                                              1293
                                                                                                                                                                                                                                                                                                                                                                                                                                            1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1353
                                                                                                                                                                                                                                                                                                                                                                         1173
                                                                                                                                                                                                                                                                                                                   1053
                                                                                                                                                                                                                                                                                                                                 1081
                                                                                                                                                                                                                                                                                                                                              1113
                                                                                                                                                                                                                                                                                                                                                            1141
                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                              933
                                                                                                                                                                                                                                                                            196
                                                                                                                                                                                                                                                                                         993
                                                                                                                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                   873
                                                                                                                                                                                                                      841
                                                                                                                                                                             753
                                                                                                                                                                                           781
                                                                                                                                                                                                       813
                                                     481
                                                                                541
                                                                                             573
                                                                                                          601
                                                                                                                        633
                                                                                                                                      661
                                                                                                                                                  693
                                                                                                                                                                721
                                        453
                          421
                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                8 6 8 6 8 6 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                 8 6 8 6
                                                                                                           8 6
                                                                                          g
             원
                      ठे
                                   ద
                                                    6 6 6
```

240 272

152 180 212

92

332 360 392 420 452

ö

Gaps ö

Length 2354;

780

753

g

999 692 720 752

540 572 900 632

212 240 272

120 152

8

300

332 360 392

420 452 480 512 540 572 9 632 99 692 720 752 780 812

```
CCACAACACATGATTCAGAAAACAAGAAAACGCAAGTATTTTCACCATAACCAGCTAGAT 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTTTCACAGTC 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTTTCACAGTC 1052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAGGACCCATA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAGGACCCATA 1112
                                                                                                                                                                             TATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAGAAGCAGTCCTAAAAGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTTGGTCTCAG
                                            TTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTGACGAATAC
                                                                                                      AGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTGAAAGCGGG
                                                                                                                     AGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTGAAAGCGGG
                                                                                                                                                                                                                                                      CGCAATAGACACTGTTCAAGTCATCAGTCACGTTCGAAGAGCCACCGAAGGAAAGATCC
                                                                                                                                                                                                                                                                                                   AGGAGTATAGAGGATGATGATGAGGAGGGTCACCTGATCTGTCAAAAGTGGAGAGGTCTAAAGA
                                                                                                                                                                                                                                                                                                                                                            GCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTGTGTTTTGAACTACTGGACTTAGTACTTACGATTTCATTAAAGAAAACAGCTTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     813 TCTGACTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGAACGCACACTGAAAAAC
TTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTGACGTTGACAATAC
                                                                                                                                                               TATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAGGAAGCAGTCCTAAAAGGAAG
                                                                                                                                                                                                                          CGCAATAGACACTGTTCAAGTCATCAGTCACGTTCGAAGAGCCACCGAAGGAAAAGATCC
                                                                                                                                                                                                                                                                                   AGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAGTGGAGACGTTCTAAGA
                                                                                                                                                                                                                                                                                                                                            GCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGTGC
                                                                                                                                                                                                                                                                                                                                                                                                       ATTGATCATGGCATGGATGCATGCATGTAGCAGTGAAAATCGTAAAAATGTAGGCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                       ATTGATCATGGCATGGCATGCATGTAGCGGTGAAAATCGTAAAAATGTAGCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTACTGATCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTACTGATCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATAGTGTCTTCCGATGTGTCCCAGATGCTAGAATGGTTTGATCATCATGGTCATGTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATAGTGTCTTCCGATGTCCAGATGCTAGAATGGTTTGATCATCATCATGGTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTIGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACAGCTTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAAAAATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCATTICAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAAATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTGACTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGAACGCACACTGAAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGAACATCACAGTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTTGGTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         873
                                            61
                                                                       93
                                                                                                    121
                                                                                                                                  153
                                                                                                                                                               181
                                                                                                                                                                                           213
                                                                                                                                                                                                                                                    273
                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                             333
                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                        393
                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                   453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1081
                 33
                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             993
                                                             음 중
                                                                                                                        Q
                                                                                                                                                             8 8
                                                                                                                                                                                                               8
                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                        상염
                                                                                                                                                                                                                                                                                                                                      8 6
                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
               원
장
                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ብ ራ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Application US/10339656

Batent No. 673378

GENERAL INPORMATION:
GENERAL INPORMATION:
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS
CURRENT APPLICATION NUMBER: US/10/339,656
CURRENT FILING DATE: 2002-04-01
PRIOR FILING DATE: 2001-03-19
PRIOR FILING DATE: 2001-03-19
PRIOR FILING DATE: 2000-08-24
NUMBER OF SEQ ID NOS: 5
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NOS: 5
                                                                                                                                                                                         CCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTTTCACAGTC 1020
                                                                                                                                                                                                         CCTTGTGATGTTTGGAGGATAGGTTGCATTCTTATTGAATATTACCTTGGTTTCACAGTC 1052
                                                                                                                                                                                                                                                    TITCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAGGACCCATA 1080
                                                                                                                                                                                                                                                                  CCACAACACATGATTCAGAAAACAAGAAACGCAAGTATTTTCACCATAACCAGCTAGAT 1140
                                                                                                                                                                                                                                                                                                                               CCACAACACATGATTCAGAAAAACAAGAAAAGGAAGTATTTTCACCATAACCAGCTAGAT 1172
                                                                                                                                                                                                                                                                                                                                                                       TGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGTTGAAGGAA 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTATGCTTTGTCATGAAGAACATGAGAACTGTTTGACCTGGTTCGAAGAATGTTA 1260
                                                                                                                                                                                                                                                                                                                                                                                                    researcaaacacacricrecrestracaraterrassaccascacacacarassacaa 1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTATGCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAAGAATGTTA 1292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
             900
                                                                                                                             TTGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTTGGTCCAG 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                      ACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGAACATCACAGTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGTGCATCCCTCTTGAAGCTTCGCACTCTGTTGAAGAGGACACTCATCCCCAGTCATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 4; Length 2354;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 1335;
100.0%; Pred. No. 0;
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTATTAAAAAAGAAA 1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.
Matches 1335; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                    1021
                                                                                                                                                                                                                                                                                1053
                                                                                                                                                                                                                                                                                                             1081
                                                                                                                                                                                                                                                                                                                                           1113
                                                                                                                                                                                                                                                                                                                                                                        1141
                                                                                                                                                                                                                                                                                                                                                                                                   1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1353
                                         813
                                                                       841
                                                                                                   873
                                                                                                                                901
                                                                                                                                                            933
                                                                                                                                                                                                                       993
                                                                                                                                                                                                                                                                                                                                                                                                                                   1201
             781
                                                                                                                                                                                         961
                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                   8 6 8 6 8 6
                                g
                                                          õ
                                                                                        g
                                                                                                                           6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                        र्व क्षे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
```

840

872

900

ద ò g õ g ò g

a ò

```
1498
                                                                                                                                                                                                                                                                                                                                                                                                                                             1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1312
                                                                                                                                                                                                                                                                                                                                                                                                 1138
                                                                                                                                                                                                                                                                                                                                                                                                                        1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1013 TCACAGTCTTTCAGACTCATGATAGTAAGAGCACCTGGCAATGATGAAGAACGAATATTAG 1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1073 GACCCATACCACAACATGATTCAGAAACAAGAAAACGCAAGTATTTCACCATAACC 1132
                                                                                                                                                                                                                                                                                                                                                    1078
                                                                                                                                                                                                                                                                                             892
                                                                                                                                                                                                                                                                                                                                                                           952
                                                                                                                                                                 838
                                                                                                                                                                                       712
                                                                                                                                                                                                             898
                                                                                                                                                                                                                                    772
                                                                                                                                                                                                                                                          958
                                                                                                                                                                                                                                                                                  832
                                                                                              592
                                                                                                            652
                                                               TGAAGGAATTTATGCTTTGTCATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAGCATCCTT
                                                                                                                                                                                                                                                                                                                            AGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGT
                                                                                                                                                                                                                                                                                  GCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAA
                                                                                                                                                                                                     ACAGTACTTTGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                       GGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTT
                    TAGAGTGCATTGATCACGGCATGGATGGCTTACATGTAGCAGTGAAATTGTAAAAATG
                                                                                              CTGATCCCAATAGTGTCTTCCGATGTGTCCTAGAATGGTTTGATCATCATGTTC
                                                                                                                                           ATGTTTGTATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACA
                                                                                                                                                                                                                                    TABATITITIACATCATAATAAATTAACCCATACAGATCTGAAGCCTGAAATATTITGT
                                                  TAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 9, Application US/09016000
; Patent No. 5962232
; GENERAL INFORMATION
APPLICANT: Hillman, Jennifer L.
APPLICANT: Lal, Preeti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTTTGACTTATTAAAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-016-000-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1499
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1139
                                                                                                                                                                                                                   839 (
                                                                                                                                                                                                                                                                                                                                                          1019
                                                                                                                                                                                                                                                                                                                                                                                                      1079
                                                                                                                                                                                                                                                                 899
                                                                                                                                                                                                                                                                                                              959
                                                                                                                                                                                                                                                                                                                                    833
                                                                                                                                                                                                                                                                                       773
                                                                                                                                                                                                                                                                                                                                                                                 893
                                                                                                                                                                                                                                                                                                                                                                                                                              953
                               599
                                                                                                                                                 593
                                                                                                                                                                      779
                                                                                                                                                                                             653
                                                                                                                                                                                                                                         713
                                                                             629
                                                                                                   533
                                                                                                                          719
                                                     473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                     g
                                                                                                                                                                  g
                                                                                                                                                                                       ò
                                                                                                                                                                                                                                         ò
                         g
                                               8
                                                                     g
                                                                                                   ð
                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         598
                                            1232
                                                                                                               172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAGGCAGTCCTA 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAGGAAGCGCAATAGACACTGTTCAAGTCATCAGTCACGTTCGAAGAGCCACCGAAGGA 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           538
                                                                                  AAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAGTGGAGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACGAATACAGGAATGACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTG
                                                                                                                                                                                                                                                                                                    AND RELATED PRODUCTS AND METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCATTATTTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTG
                                     TITATGCITIGICATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAAGAATGTTA
CCACAACACATGATTCAGAAAACAAAAACGCAAGTATTTTCACCATAACCAGCTAGAT
                        TGGGATGAACACACTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGTTGAAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1549;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1094.2; DB 4; Length
Pred. No. 0;
0; Mismatches 118; Indels
                                                                                                                                                                                                                                         US-09-095-999-26
US-09-05-999-26
IUS-09-05-999-26
Patent No. 6797513
GENERAL INPORMATION:
PAPPLICANT: ULLRICH, Axel
APPLICANT: ULLRICH, Axel
TITLE OF INVENTION: LLK PROTEIN KINASES AND R
TITLE FERENCE: 038602/0431
CURRENT FILING DATE: 1099-07-31
PRIOR PRIOR APPLICATION NUMBER: 09/127,248
PRIOR FILING DATE: 1999-07-31
PRIOR FILING DATE: 1997-06-17
PRIOR APPLICATION NUMBER: US 08/877,150
PRIOR PILING DATE: 1997-06-17
PRIOR PILING DATE: 1997-06-17
PRIOR FILING DATE: 1997-06-17
PRIOR FILING DATE: 1997-06-17
PRIOR FILING DATE: 1997-06-17
SOFTWARE: PATENTION NUMBER: US 06/034,286
SOFTWARE: PATENTION NUMBER: US 06/034,286
SOFTWARE: PATENTION UNDER: US 06/034,286
SOFTWARE: PATENTING DATE: 1997-06-17
PRIOR PILING DATE: 1997-06-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82.0%; & illarity 90.8%; E Conservative 0;
                                                                                                                                                                                TYPE: DNA
CORGANISM: Mus musculus
US-09-905-999-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Simi
Matches 1165;
                                                                                                                                                                                                                                       09-905-999-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                479
                                                                                                                                                                                        1353
                                                                        1201
                                                                                                                                                                  1321
      1113
                            1141
                                                                                              1233
```

q ò

셤 ઠે 임 à a ò 셤 õ

```
1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 238, Application US/09919039
Patent No. 6727066
GENERAL INFORMATION:
GENERAL INFORMATION:
TIPLE OF INVENTION: GENES EXPRESSED IN TREATED HUMAN C3A LIVER CELL CULTURES
FILE REFERENCE: PA-0035 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1158 TCACAGTCTTTCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGAAGGAATATTAG 1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGTCTCAGCCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTTGGTT 1157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCACAGTCTTTCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAG 1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1218 GACCCATACCACAACACATGATTCAGAAAACAAGAAAACGCAAGTATTTTCACCATAACC 1277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAGCATCCTT 1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCATCCTT 1457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGAAGGAATTTATGCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAA 1397
                                                                                                                                                        592
                                                                                                                                                                                                                                                                                                                                                                                   772
                                                                                                                                                                                                                                                                                                                                                                                                                      917
                                                                                                                                                                                                                                                                                                                                                                                                                                                        833 TGAAAAACACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGAACATC 892
                                                                                532
                                                                                                                 677
                                                                                                                                                                                                                                652
                                                                                                                                                                                                                                                    738 ATGTTTGTATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAAA 797
                                                                                                                                                                                                                                                                                                         712
                                                                                                                                                                                                                                                                                                                                              857
                                                                                                                                                                                           CTGATCCCAATAGTGTCTTCCGATGTGCCAGATGCTAGAATGGTTTGATCATGGTC 737
                                                                                                                                                                                                                                                                                                                                                                                                       858 TAAATTTTTTACATCATAATAAATTTAACCCATACAGATCTGAAGCCTGAAAATATTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1278 AGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGT
       TAGAGTGCATTGATCATGGCATGGCATGCATGTAGCAGTGAAAATCGTAAAAATG
                               TAGAGTGCATTGATCGTGCATGGCATGGCATGTTGTAGCAGTGAAAATCGTAAAAAATG
                                                                                                       GCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAGTACTTTGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAAGGAATTTATGCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAA
                                                                                  TAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTA
                                                                                                                                                      CTGATCCCAATAGTGTCTTCCGATGTGTCCAGATGCTAGAATGGTTTGATCATGGTC
                                                                                                                                                                                                                                ATGITTGTATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACA
                                                                                                                                                                                                                                                                                                         GCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAA
                                                                                                                                                                                                                                                                                                                                                                                   713 TAAATTTTTTACATCATAATAAATTTAACCCATACAGATCTGAAGCCTGAAAATATTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACAGTACTTTGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACCCATACCACACACATGATTCAGAAAACAAGAAAACGCAAGTATTTTCACCATAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTTTGACTTATTAAAAAAGAAA 1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 6
US-09-919-039-238
                                                                                                                                                    533
                                                                                                                                                                                         678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1338
       413
                                                                              473
                                                                                                                                                                                                                                593
                                                                                                                                                                                                                                                                                                         653
                                                                                                                                                                                                                                                                                                                                              798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1133
                                                                                                                                                                                                                                                                                                                                                                                                                엄
                               셤
                                                                              ò
                                                                                                       윱
                                                                                                                                                      ò
                                                                                                                                                                                       유
                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTCATTATTTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTG 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACGAATACAGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTG 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACGAATACAGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTG 407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAGAAGCAGTCCTA 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGAAGCAGTCCTA 467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAGGAAGCGCAATAGACACTGTTCAAGTCATCAGTCACGTTCGAAGAGCCACCGAAGGA 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAGATCCAGGAGTATAGAGGATGATGAGGGGTCACCTGATCTGTCAAAGTGGAGACG 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCATTATTTAGAAGCAAGGTCCTTGAATGAGCGAGATATCGGGACCGGAGATACGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGGAAGCGCAATAGACACTGTTCAAGTCATCAGTCACGTTCGATGA------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 353 TTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 2446;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 2;
APPLICANT: Bandman, Olga
APPLICANT: Akerblom, Ingrid E.
APPLICANT: Shah, Purvi
APPLICANT: Corley, Noil C.
APPLICANT: Guegler, Karl G.
TITLE OF INVENTION: PROTEIN KINASE MOLECULES
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
                                                                                                                                                                                                                                        ZDP: 10-05A
ZDP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: Diskette
COMPUTER: Diskette
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/016,000
FILLING DATE: HEREWITH
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81.5%; Score 1088.2;
92.8%; Pred. No. 0;
iive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PF-0465 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Billings, Lucy J
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
                                                                                                                                                                  STREET: 3174 Porter Drive
CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 2446 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: NEUTFWT01
CLONE: 339963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: 9: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 92.8
Matches 1190; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 650-845-4166
                                                                                                                                                                                                                              USA
                                                                                                                                                                                                           STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-016-000-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        516
```

g

g

g ò

ò

셤

ઠે 용 ઠે

ઠે

φ

```
APPLICANT: ULLRICH, Axel
APPLICANT: ULLRICH, Axel
APPLICANT: ULLRICH, Axel
APPLICANT: ULLRICH, Oliver
ITILE OF INVENTION: CLK PROTEIN KINASES AND RELATED PRODUCTS AND METHODS
FILE REFERENCE: 038602/0431
CURRENT APPLICATION NUMBER: US/09/905,999
CURRENT PILLING DATE: 1999-07-31
PRIOR APPLICATION NUMBER: PCT/1B97/00946
PRIOR APPLICATION NUMBER: DCT/1B97/00946
PRIOR APPLICATION NUMBER: US 08/877,150
PRIOR PILLING DATE: 1997-06-17
PRIOR PILLING DATE: 1997-06-17
PRIOR PRILING DATE: 1997-06-17
PRIOR PRILING DATE: 1997-06-17
PRIOR PELLING DATE: 1997-06-17
SPRIOR PRILING DATE: 1996-12-19
NUMBER OF SEQ ID NOS: 26
SOFTWARE: PALENTIN version 3.0
                 1823 GCTTTCTCAAGATGTTGAACATGAGCGTCTCTTTGACCTCATTCAGAAAATGTTGGAGTA 1882
                                                                                                                                                                                                                                                                                                                                                                                     1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           182 ATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAGAAGCAGTCCTAAAAGGAAGC 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAATAGACACTGTTCAAGTCATCAGTCACGTTCGAAGAGCCACCGAAGGAAAAGATCCA 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            302 GGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAGTGGAGACGTTCTAAGAG 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        503 AGCGATATGAAATTGTAAGCACCTTAGGAGAGACTTCGGGCCGAGTTGTGCAGTGTG 562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGAACACACAGTTCTGCTGGTAGATATGTTAGGAGGACGCTGCAAACCGTTGAAGGAATTTAT
                                                                                                                                                                                                                 GCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAAGAATGTTAGAATA
                                                                                                                                                                                                                                                                                                                                               ATCGAGAGAACAGCAGTTACCGAAGCCAGCGCAGCAGCCGAAGGAAACACAGAAGGCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         443 AGAGTGTAGAGGACGACGCTGAGGGCCACCTCATCTACCACGTCGGGGACTGGCTACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCGTGAAGCAGCTCGGTTCAGAAATCCAAGTATTAGAGCACTTAAAATAGTACTGATCCCA
                                                                                                                           389 gasaccasacarcarcas accircarcitar acacacacaca a ses as a casacacacacas a ses as a casa a c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGATCATGGCATGGATGCATGCATGTAGCAGTGAAAAATCGTAAAAAATGTAGGCCGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       563 TGGACCATCGCAGGGGGGGAACACGAGTTGCCCTGAAGATCATTAAGAATGTGGGAGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1538;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        36.0%; Score 481.2; DB 4;
64.6%; Pred. No. 1.8e-141;
iive 0; Mismatches 398;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 22, Application US/09905999
Patent No. 6797513
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 64.6
Matches 736; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1326 AAAAAAGA 1333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1943 GAAGAAAA 1950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Mus musculus
US-09-905-999-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-905-999-22
                                                                                  1146
                                                                                                                                                                                                             1206
                                                                                                                                                                                                                                                                                                                                               1266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        482
                                                                    ò
                                                                                                                                     셤
                                                                                                                                                                                                          8 8
                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGATGTCTGGAGGATAGGATGCATTCTTATTGAATACTATCTTGGGTTTACCGTATTTCC 1642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACACATGATTCAGAAAACAAGAAACGCAAGTATTTCACCATAACCAGCTAGATTGGGA 1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        983 AGATGAAATTGTTGATACTTTAGGTGAAGGAGCTTTTGGAAAAGTTGTGGAGTGCATCGA 1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1103 ridakiscriscrickiskakaracakistriskakarararakakarakakasaksi 1162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1283 rcgacrogarcararcagaaagarggcararcagarargcaagrcrorgaarrrrrgca 1342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1343 CAGTAATAAGTTGACTCACACAGACTTAAAGCCTGAAAACATCTTATTTGTGCAGTCTGA 1402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1403 CTACACAGAGGCGTATAATCCCAAAATAAAGGTGATGAACGCACCTTAATAAATCCAGA 1462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1463 TATTAAAGTTGTAGACTTTGGTAGTGCAACATATGATGACGAACATCACAGTACATTGGT 1522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      966 IGAIGITIGGAGCATAGGITGCATICTIATIGAATATTACCTIGGITICACAGICTITCA 1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1026 GACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAGGACCCATACCACA 1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1643 AACACACGATAGTAAGCATTTAGCAATGATGGAAAGGATTCTTGGACCTCTACCAAA 1702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAATAAATTTTTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       726 TCATAATAAATTAACCCATACAGATCTGAAGCCTGAAAATATTTTGTGAAGTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          426 TCATGGCATGGATGGCATGCATGTAGCAGTGAAAATCGTAAAAATGTAGGCCGTTACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTACTGATCCCAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       546 TGTCTTCCGATGTCCAGATGCTAGAATGGTTTGATCATCATGCTCATGTTTGTATTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACAGCTTTCTGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGAACGCACACTGAAAAACACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTTGGTCTCAGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           366 ATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGTGCATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGAACATCACAGTACTTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 2254;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 4;
                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No. 6727066 420527.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 638.4; DB 4;
Pred. No. 3.8e-191;
0; Mismatches 206;
CURRENT APPLICATION NUMBER: US/09/919,039
CURRENT FILING DATE: 2002-09-09
PRIOR APPLICATION NUMBER: 60/222,113
PRIOR FILING DATE: 2000-07-28
NUMBER OF SEQ ID NOS: 401
SOFTWARE: PERL PROGRAM
ESQ ID NO 238
LENGTH: 2254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g, or other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 78.7%;
Matches 762; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: unsure
i LOCATION: 231, 241
i OTHER INFORMATION: a, t, c,
US-09-919-039-238
                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       906
                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
```

à g ે 셤 8 8 ò g ò g ठे g 8 6

8 8 ò g 8 8 8

g õ 엄 8

g

ઠે

음

δ

g ઠે

ઠે

요

8 6

8

કે

ઠે

셤

ઠે g g

ઠે 유 ઠે

ઠે

윱

ઠે 요 ઠે

```
1287
                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 24, Application US/09905999;
Patent No. 6797513
GENERAL INFORMATION:
APPLICANT: ULLRICH, Axel
APPLICANT: NAYLER, Oliver
TITLE OF INVENTION: CLK PROTEIN KINASES AND RELATED PRODUCTS AND METHODS
CURRENT APPLICATION NUMBER: US/09/905,999
CURRENT FILING DATE: 2001-07-17
PRIOR APPLICATION NUMBER: 09/127,248
PRIOR APPLICATION NUMBER: PCT/1B97/00946
PRIOR FILING DATE: 1997-06-17
PRIOR FILING DATE: 1996-12-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cadeceracedecrearcricescaereceacrireaceaceaecareareaecaeca 1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGTTGAAGGAAT 1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGATGAGAACACCTCAGCCGGCGGCTACGTTCGTGAGAACTGCAAACCTCTGCGGCGGT 1342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       982
                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGATATCAAAGTTGTTGACTTTTGGAAGTGCAACGTATGATGAACATCACAGTACTT 901
                                                              Acaacaagaaccrocrocrocrocrocrocrocrocrocrocraccarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocracarocra
                                                                                                                                                                              CCTACCCCATCCACCAAGTGCGCCACATCCAGCTTCTGCCAGGCCGTCAAGTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              crrcrcgargarcagaagacaagaaaacagaararrrrrrrarcgggrcgccrcgarr
                                                                                                                                                                                                                                                                  CATTICAAATIGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAATAAATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                   TACATCATAATAAATTAACCCATACAGATCTGAAGCCTGAAAATATTTTGTTGTGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGACTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGAACGCACACTGAAAAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .043 trárcriccacricacarraccaacccccaacarcarccrasacricacrescricacacca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1103 cargcgargrarggagcaraggcargcarcarcrrrgagracracgrrggcrrcaccrcr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTATGCTTTGTCATGAGAACATGAGAACTGTTTGACCTGGTTCGAAGAATGTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u> arcrigaccricagaggaggaggaccaccagcrcrircarcrigarrigaaaarargcrag</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTATGAGCCTGCTTAGGCGCTGACCTTAGGTGAAGCCCTTCAGCATCCTTTCTTCGCCT
ATAGTGTCTTCCGATGTCCAGATGCTAGAATGGTTTGATCATCATGGTCATGTTTGTA
                                                                                                                                 TTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACAGCTTTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTTGGTCTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTTTCACAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCAGACTCATGATAGTAGAGGCACCTGGCAATGATGGAACGAATATTAGGACCCATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CACAACACATGATTCAGAAAACAAAAACGCAAGTATTTTCACCATAACCAGCTAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 8
US-09-905-999-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1403
                                                              683
                                                                                                                                 602
                                                                                                                                                                                                   743
                                                                                                                                                                                                                                                                  662
                                                                                                                                                                                                                                                                                                                                 803
                                                                                                                                                                                                                                                                                                                                                                                                   722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   962
```

```
987 GAAGTCAGTGAAGAACACCAGCATCCGAGTGGCAGACTTTGGCAGTGCCACGTTTGACCA 1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1047 IGAACATCACCACCATTGTGGCCACCGTCACTACCGCCCACCTGAGGTGATCCTTGA 1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1346
                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             945 TTTAGGTTGGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTA 1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTTGGTTTCACAGTCTTTCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACG 1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1185 CAAACCGTTGAAGGAATTTTATGCTTTGTCATGAAGAACATGAGAAACTGTTTGACCT 1244
                                                                                                                                                                                                                                                                                                                        344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       944
                                                                                                                                                                                                                                                                                                                                                                                                                               404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                867 TCATGCCCTTAGATTTCTACACGAGAACCAGCTGACCCACACAGACTTGAAGCCAGAGAA 926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              884
                                                                                                                                                                                                                                                                                                                                                                          CAGTAAGCGCAGCAGCCGGAGTGTGGAAGATGACAAGGAGGGCCACCTGGTGTGCCGGAT 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                747 ccarcercararerecarcecrrrreaecrecreeecaagaacacerrreaerrecreaa 806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         927 CATCTTGTTTGTGAATTCTGAGTTTGAAACCCTCTACAATGAGCACAAAGAGCTGCGAGGA 986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGTAATGTGGGCAAGTATCGGGAAGCTGCTCTAGAAATTTAATGTTCTCAAGAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAATAGTACTGATCCCAATAGTGTCTTCCGATGTGTCCAGATGCTAGAATGGTTTGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         807 GGAGAACAACTTCCAGCCTTACCCCCTACCACATGTCCGGCACATGGCCTACCAGCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGGCGATTGGCTCCAAGAGCGATATGAGATCGTGGGGGAACCTGGGTGAAGGCACCTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            285 CCGAAGGAAAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                  345 TGGAGACGTTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAAGGTGGTGGTGCTTGGACCATGCCAGAGGCAAGTCACAGGTTGCCCTGAAGATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               465 AAAAAATGTAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          687 CAAGGAGAAAGACAAGGAAAATAAGTTCCTTTGTGTCCTGATGTCTGACTGTTCAACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCATGGTCATGTTTTGTATTGTTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGAAAACAGCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCAGTCAATAAATTTTTACATCATAATTAAATTAACCCATACAGATCTGAAGCCTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       765 TATTTTGTTTGTGAAGTCTGACTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 825 ACGCACACTGAAAAACACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAACATCACAGTACTTTGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATATTAGGACCCATACCACACACATGATTCAGAAAACAAGAAAACGCAAGTATTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1227 GATTCTAGGACCCATCCCATCACACATGATCCACCGTACCAGGAAGCAGAAATATTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCATAACCAGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        caaagggggccrcgrrrrgggargaagaacagcrcrgargggggggrargraagaagaacrg
                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                               Score 454.8; DB 4;
Pred. No. 4.6e-133;
0; Mismatches 362;
NUMBER OF SEQ ID NOS: 26
SOFTWARE: Patentin version 3.0
SEQ ID NO 22
LENGTH: 1787
                                                                                                                                                                                                               Query Match 34.1%;
Best Local Similarity 65.0%;
Matches 672; Conservative
                                                                                                                                    musculus
                                                                                                      : TYPE: DNA
; ORGANISM: Mus
US-09-905-999-24
                                                                                                                                                                                                                                                                                                                                                                             447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1125
```

ω

```
RESULT 10
US-09-949-016-2648
; Sequence 2648, Application US/09949016
; Patent No. 6912339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF; FILE REFERENCE: CL001307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  980 gaagricacidaadaacaccaccatccaagragcrigactrirgscagrigccacarrigacca 1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .040 réagcaccacacaccarrerescalades de contra de contra de contra de contra de 1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1160 CCGGGGCTTCACTCTTCCAGACCCACGAGAAACCGAGAGCACCTGGTGATGATGGAGAA 1219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1065 AATATTAGGACCCATACCACAACACATGATTCAGAAAACAAGAAAACGCAAGTATTTCA 1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1280 caaagggggccraarrigggargagaacagcrcrgacggccggrargrgaaggaacrg 1339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1245 GGTTCGAAGAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCA 1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTTGGTTTTCACAGTCTTTCAGACTCATGATAGTAAAAGAGCACCTGGCAATGATGGAACG 1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              884
                                                                                                                                          619
                                                                                                                                                                                                                                                                                                                                                                                                                                        704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1400 cargadgadgardrinadartricacccreccadgearcacardgeccaaggeccrecr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCATAACCAGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1340 caaaccrecidaadarracardecrecaadacrecerodageacacardererringaeer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               945 TTTAGGTTGGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTA
825 ACGCACACTGAAAAACACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1185 CAAACCGTTGAAGGAATTTATGCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCT
                                                                                                                        620 CCGCAACGTGGGCAAGTACCGGGAGGCTGCCCGGCTAGAAATCAACGTGCTCAAAAAAT
                                                                                                                                                                                                                                                         740 ccacécicacaterécatecertricacerecerecesasasas acertiticas de construitor de la constante de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                800 ggagaanaacinccagccnnaccccnaccacangregecangecangecnaccageneng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCAGTCAATAAATTTTTACATCATAAATTAACCCATACAGATCTGAAGCCTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  860 ccacccrragarrrcriccardagaarcaccrgacccaracagacrrigaaaccrgagaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               765 TATTTTGTTTGTGAAGTCTGACTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   920 carccretrrergaarrcreagrrreaaacccrcracaareaccacaeaggcrereaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGAACATCACAGTACTTTGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGC
                                                                                      AAAAAATGTAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTT
                                                                                                                                                                                                        525 AAATAGTACTGATCCCAATAGTGTCTTCCGATGTGTCCAGATGCTAGAATGGTTTGATCA
                                                                                                                                                                                                                                                                                                                         585 TCATGGTCATGTTTGTATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                           645 AGAAAACAGCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1305 GCATCCTTTCTTTG 1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1460 GCACCCCTTCTTTG 1473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                      ò
                                                                                                                                                g
                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                GATGAGGAGGATGTTAGAGTTCGACCTGCTCAGCGCATCACATTGGCAGAAGCCTTGCT 1466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cagrandececacadecededericadandardacandedecercecercerereceden 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGAGACGTTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGG 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCGAAGGAAAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTTCGAAGAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING
TITLE OF INVENTION: PATHWAY GENE EXPRESSION
NUMBER OF SEQUENCES: 1490
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 1762;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 432.4; DB 4;
Pred. No. 5.7e-126;
0; Mismatches 376;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS CURRENT APPLICATION DATA:
PILLIGATION NUMBER: US/09/016,434
FILLING DATE: HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: CALIFORNIA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0002 US
RELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 845-4166
INFORMATION FOR SEQ ID NO: 1439:
SEQUENCE CHARACTERISTICS:
LENGTH: 1762 base pairs
TYPE: nucleic acid
STRANBENES: single
TYPE: INMEDIATE SOURCE:
IMMEDIATE SOURCE:
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1439, Application US/09016434 Patent No. 6500938 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 32.4%;
Best Local Similarity 63.6%;
Matches 658; Conservative
                                                                                                                                                                                                                       GCATCCTTTCTTTG 1318
                                                                                                                                                                                                                                                   1467 GCACCCCTTCTTG 1480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: HEREWIT
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENBANK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; LIBRARY: GENBAN; CLONE: 9632971
US-09-016-434-1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                 RESULT 9
US-09-016-434-1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                285
                                                                                                  1245
                                                                                                                                                         1407
                                                                                                                                                                                                                       1305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                               ð
                                                                                                                                                      ď
                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                     셤
```

```
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR PLING DATE: 2000-10-03
PRIOR PLING DATE: 2000-10-03
PRIOR PLING DATE: 2000-10-03
PRIOR PLING DATE: 2000-09-08
NUMBER OF SED ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2649
LENGTH: 1763
       CAAACCGTTGAAGGAATTTATGCTTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCT 1244
                                                                                                                          CCATAACCAGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTG 1184
                                                                                                                                                                                         CAAAGGGGGCCTAGTTTGGGATGAGAACAGCTCTGACGGCCGGTATGTGAAGGAGAACTG 1339
                                                                                                                                                                                                                                                                                                                                                   1340 caaaccrcrgaagagrracargcrccaagacrcccrggaggaggaggaggrgrrrgaggr 1399
                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTTCGAAGAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCA 1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1400 GATGAGGAGGATGTTAGAATTTGACCCTGCCAGCGCATCACACTGGCCGAGGCCCTGCT 1459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             440 CAGTAAGCGCAGCAGCAGCGGAGTGGGAAGATGACAAGGAGGGTCACCTGGTGCCGGAT 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         285 CCGAAGGAAAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAG 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                680 CAAGGAGAAGGACAAAGAAAACAAGITCCTGTGTGTCTTGATGTCTGACTGGTTCAACTT 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  740 ccacgercacargrecarcecrrreagerceresecaagaacacerrreagricereaa 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           345 TGGAGACGTTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        560 CAAGGTGGTGGAGTGCTTGGACCATGCCAGAGGAAGTCTCAGGTTGCCCTGAAGATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          620 ccecaaceredeagracceceaegraccecececraaaarcaacerearaaaar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     525 AAATAGTACTGATCCCAATAGTGTCTTCCGATGTCCAGATGCTAGAATGGTTTGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      500 CGGCGATTGGCTCCAAGAGCGATATGAGATTGTGGGGAACCTGGGTGAAGGCACCTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 465 AAAAAATGTAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           585 TCATGGTCATGTTTGTATTGTGTTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1763;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 430.8; DB 4;
Pred. No. 1.8e-125;
0; Mismatches 377;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2649, Application US/09949016; Patent No. 6812339; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 32.3%;
Best Local Similarity 63.5%;
Matches 657; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1305 GCATCCTTTCTTTG 1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1460 GCACCCTTCTTTG 1473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -09-949-016-2649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-949-016-2649
                                                                                                                          1125
                                                                                                                                                                                                 1280
                                                                                                                                                                                                                                                                            1185
                                                                                                                                                                                                                                                                                                                                                                                                                                  1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 405
                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                      ò
                                                                                                                                                                                 a
                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTAGGTTGGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTA 1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1100 GCTGGGCTGGGCACAGCCCTGTGACGTCTGGAGCATTGGCTGCATTCTCTTTGAGTACTA 1159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGGGGCTTCACACTCTTCCAGACCCACGAAAACCGAGAGACCTGGTGATGATGAGAAA 1219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   reaccacacacacarrerecentes a constrain de la constanción de la constante de constante de la con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTTGGTTTCACAGTCTTTCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACG 1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1065 AATATTAGGACCCATACCACAACACATGATTCAGAAAACAAGAAAACGCAAGTATTTTCA 1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 285 CCGAAGGAAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAG 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGGCGATTGGCTCCAAGAGCGATATGAGATTGTGGGGAACCTGGGTGAAGGCACCTTTGG 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAAAGTIGTAGAGTGCATGATCATGGCATGGATGCATGTAGCAGTGAAAATCGT 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGCAACGTGGGCAAGTACCGGGAGGCTGCCCGGCTAGAAATCAACGTGCTCAAAAAAT 679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAATAGTACTGATCCCAATAGTGTCTTCCGATGTCCCAGATGCTAGAATGGTTTGATCA 584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAGGAGAAGGACAAAGAAACAAGTTCCTGTGTCTTGATGTCTGACTGGTTCAACTT 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 740 ccacedrcacarerecarecerriteaecrecresecaacacerreaerrecreaa 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           800 GGAGAATAACTTCCAGCCTTACCCCCTACCACATGTCCGGCACATGGCCTACCAGCTCTG 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAGTCAATAAATTTTTTACATCATAATAAATTAACCCATACAGATCTGAAGCCTGAAAA 764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              825 ACGCACACTGAAAAACACAGATATCAAAGTTGTTGACTTTTGGAAGTGCAACGTATGATGA 884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGAGACGTTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                645 AGAAAACAGCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        765 TATITITITITICICAAGTCTGACTATGTAGTCAAATATAATTCTAAATGAAACGTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAGTCAGTGAAGAACACCAGCATCCGAGTGGCTGACTTTGGCCAGTGCCACATTTGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAACATCACAGTACTTTGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAGGTGGTGGAGCTTTGGACCATGCCAGAGGGAAGTCTCAGGTTGCCCTGAAGATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      465 AAAAAATGTAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCATGGTCATGTTTGTATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1763;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 430.8; DB 4;
Pred. No. 1.8e-125;
0; Mismatches 377;
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR PELLOCATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR PILING DATE: 2000-10-03
PRIOR PILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
SPRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: PageSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 32.3%;
Best Local Similarity 63.5%;
Matches 657; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-949-016-2648
                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 2648
                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 1763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              585
```

유 ઠે

ò g ઠે ద g

ð 8

ઠે

셤

ઠે

ઠે 유 ò 셤 ઠ 윰. 욧 8

ద

ઠે

용

ઠે

8

ò

ठ

ô

619

524 679 584

644

ö

```
1415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTAGGTTGGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTA 1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTTGGTTTCACAGTCTTTCAGACTCATGATAGTAAGAGCACCTGGCAATGATGAACG 1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1176 ccogcicricacherentes de la concentration de la concentration de la 1235 de concentration de concentration de concentration de la 1235 de concentration decentration de concentration de concentration de concentration de concentration de concentration de concentr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         764
                                                                                                                                                                                           404
                                                                                                                                                                                                                                                                                         464
                                                                                                                                                                                                                                                                                                                                       635
                                                                                                                                                                                                                                                                                                                                                                                                                                  695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCATAACCAGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                całagggggccziaktritgggargagakcakcricigackicckiarkirgigakagagaktri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAACCGITGAAGGAATTTATGCTTTGTCATGAAGAACATGAGAAACTGTTTGACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTTCGAAGAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1065 AATATTAGGACCCATACCACAACACATGATTCAGAAAACAAGAAAAGCAAGTATTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1356 CAAACTCTCAAAAATTACATGCTCCAAAACTCCCTGGAGCACGTGCAGCTGTTGACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAGTCAGTGAAGAACACCAGCATCCGAGTGGCTGACTTTGGCAGTGCCACATTTGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGAACATCACAGTACTTTGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGAAAACAGCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAGTCAATAAATTTTTTACATCATAATAAATTAACCCCATACAGATCTGAAGCCCTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATTTGTTTGTGAAGTCTGACTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGA
                                                                                                                                                                                                                                                                                       CAAAGTIGIAGAGTGCATTGATCATGGCATGGCATGCATGTAGCAGGAAAATCGT
                                                                                                                                                                                                                                                                                                                                                                                                                AAATAGTACTGATCCCAATAGTGTCTTCCGATGTCCTAGATGGTTTGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCATGGTCATGTTTGTATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAGAATAACTTCCAGCCTTACCCCTACCACATGTCGGCACATGGCCTACCAGCTCTG
                                                                                           CCGAAGGAAAAGATCCAGGAGTATAAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAG
                                                                                                                            TGGAGACGTTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGG
                                                                                                                                                                                                                                    ciaciantracitocalas de la comparta del la comparta de la comparta del comparta de la comparta del comparta de la comparta del la comparta de l
                                                                                                                                                                                                                                                                                                                                       chaggiggigadgagactaragaccaracagagaagicicagagaraccigaagaicar
                                                                                                                                                                                                                                                                                                                                                                                    465 AAAAAATGTAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTT
                                                  Gapa
                                                  ö
     Length 1788;
                                                  Indels
Score 430.8; DB 4;
Pred. No. 1.8e-125;
0; Mismatches 377;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1305 GCATCCTTTCTTTG 1318
  32.3%;
al Similarity 63.5%;
657; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             966
          Query Match
Best Local S
Matches 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9501
                                                                                                                                                                                                                                                                                                                                                                                                                                               989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          585
                                                                                                          285
                                                                                                                                                                                                                                                   516
                                                                                                                                                                                                                                                                                                   105
                                                                                                                                                        456
                                                                                                                                                                                                     345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           & g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                g
                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                   8 6
                                                                                                                                                                                                                                                                                                                                                                               ે
                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                             ò
                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 313, Application US/09976594
Sequence 313, Application US/09976594
Sequence 313, Application US/09976594
Sequence 313, Application US/09976594
GENERAL INFORMATION:
APPLICANT: Furnese, Michael
APPLICANT: Buchbinder, Jenny
TITLE OF INVENTION: GENES EXPRESSED IN C3A LIVER CELL CULTURES TREATED WITH STEROIDS FILE REFERENCE: PR-0041 US
CURRENT APPLICATION NUMBER: US/09/976,594
CURRENT FILING DATE: 2001-10-12
PRIOR APPLICATION NUMBER: 60/240,409
PRIOR APPLICATION NUMBER: 60/240,409
PRIOR FILING DATE: 2000-10-12
NUMBER OF SEQ ID NOS: 1143
SEQ ID NOS: 1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             dargadgadgardrindaartrigacctrgccagggartcacactggccdaggccrgcr 1459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATCCTAGGGCCCATCCCATCACACATGATCCACCGTACCAGGAAGCAGAAATATTTCTA 1279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         caaagggggccradrirgggargagaacacrcrcacggccggrargrgagaagaacrd 1339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAAACCGTTGAAGGAATTTATGCTTTGTCATGAAGAACATGAGAAACTGTTTGACCT 1244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTTCGAAGAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCA 1304
                                                                                                                                                                                                                                                                                                                                                      1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1064
                                                                                                                                                                                                                                                        979
                                                                                                                                                                                                                                                                                                        884
                                                                                                                                                                                                                                                                                                                                                                                                      944
                                                                                                                                                             919
                                                               859
                                                                                                             764
                                                                                                                                                                                                          824
                                                                                                                                                                                                                                                                                                                                         TGAACATCACAGAGTCTTTGGTGTCTACCGGGCACTACAGAGCTCCCGAGGTCATTTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  945 TTTAGGTTGGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTTGGTTTTCACAGTCTTTCAGACTCATGATAGAGAGCACCTGGCAATGATGGAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1065 ANTAITAGGACCCATACCACACACATGATTCAGAAAACAAAAAACGCAAGTATTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  920 CATCCTGTTTGTGAATTCTGAGTTTGAAACCCTCTACAATGAGCACAAGAGCTGTGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                               .040 relaciaciacaccarentificaccaccarinares
                                                GGAGAATAACTICCAGCCTTACCCCTACCACATGTCCGGCACATGGCCTACCAGCTCTG
                                                                                                               CCAGTCAATAAATTTTTTACATCATAATAAATTAACCCATACAGATCTGAAGCCTGAAAA
                                                                                                                                                          ccaceccrragarrrcrecargaaarcagcreaccaracagacrraaaaccagaa
                                                                                                                                                                                                          TATTITIGITITIGICAAGTCTGACTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGA
                                                                                                                                                                                                                                                                                                        ACGCACACTGAAAAACACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGA
               AGAAAACAGCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. 6673549 001622CB1
US-09-976-594-313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCATCCTTTCTTTG 1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCACCCCTTCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SULT 12
-09-976-594-313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1185
                                                                                                                                                                                                                                                                                                                825
                                                                                                                                                                                                                                                                                                                                                                                                                885
                                                                       800
                                                                                                                                                                    860
                                                                                                                                                                                                                     765
                           645
                                                                                                                       705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        상 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ठ हे ठ
                                                                                                                                                                                                        6 8 6 8 6
                                                            g
                                                                                                               8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                           ò
```

```
1211 GTCATGATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAAGAATGTTAGAATATGATC 1270
                                                                                        502 GTCATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAAGAATGTTAGAATATATGATC 561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           128 TAACCAGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAA 1187
                                                                                                                   1068 ATTAGGACCCATACCACACACACGATGATTCAGAAAACAAGAAAACGCAAGTATTTTCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 ATTAGGACCCATACCACACACATGATTCAGAAAACAAGAAAACGCAAGTATTTTCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Сарв
                                                                                                                                                                                                                                                                                                                                         Sequence 310, Application US/09016434
Patent No. 6500938
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: PATHWAY GENE EXPRESSION
NUMBER OF SEQUENCES: 1490
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 263;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER RADBLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM:
PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/016,434
FILING DATE: HEREWITH
CLASSIFICATION NUMBER:
PILING DATE:
CLASSIFICATION NUMBER:
ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: PA-002 US
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 310:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
19.7%; Score 263; DB 4; L
Best Local Similarity 100.0%; Pred. No. 7.5e-73;
Matches 263; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 3174 PORTER DRIVE
CITY: PALO ALTO
STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 263 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LIBRARY: PROSNOT20
CLONE: 1819167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear IMMEDIATE SOURCE:
                                                                                                                                                                                    1331 AGAAA 1335
                                                                                                                                                                                                                                 AGAAA 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94304
                                                                                                                                                                                                                                                                                                                        US-09-016-434-310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-016-434-310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                            g
                                        g
                                                                                        ઠે
                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              971 TTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTTTCACAGTCTTTCAGACTC 1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGATTCAGAAAACAAGAAAACGCAAGTATTTTCACCATAACCAGCTAGATTGGGATGAAC 1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1151 ACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGTTGAAGGAATTTATGCTTT 1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   262 TGTAGCGCATAGGTTGCATTCTTATTGAATATTACCTTGGTTTTCACAGTCTTTCAGACTC 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  322 ATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAGGACCCATACCACAACACA 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGATTCAGAAACAAGAAAACGCAAGTATTTTCACCATAACCAGCTAGATTGGGATGAAC 441
                                                                                                                               Sequence 699, Application US/09023655.

Patent No. 660799
GENERAL INFORMATION:
APPLICANT: Cocks, Benjamin G.
APPLICANT: Susan G. Stuart
APPLICANT: Jeffrey J. Seilhamer
ITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF BLOOD CELL GENE
ITLE OF INVENTION: EXPRESSION
NUMBER OF SEQUENCES: 1508
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27.0%; Score 360.2; DB 4; Length 1456; 99.2%; Pred. No. 3.7e-103; ive 0; Mismatches 3; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/09/023,655
FLING DATE: HEREWITH
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: INCYTE PHARMACEUTICALS, INC. STREET: 3174 PORTER DRIVE CITY: PALO ALTO STATE: CALIFORNIA COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/ACENT INPORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0001 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 845-4166
INFORMATION FOR SEQ ID NO: 699:
SEQUENCE CHARACTERISTICS:
LENGTH: 1456 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                   1476 GCACCCTTCTTTG 1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 99.27
Matches 362; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; LIBRARY: HNT2AGT01
; CLONE: 488842
US-09-023-655-699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
                                                                                      RESULT 13
US-09-023-655-699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1091
```

ô

g

ò 셤 ઠે 硆

8

```
Sequence 3, Application US/09810671

Sequence 3, Application US/09810671

Patent No. 6455291

GENERAL INFORMATION:

APPLICANT: YAN, Chunhua et al

APPLICANT: YAN, Chunhua et al

TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES

TITLE OF INVENTION: THEREOF

TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES

TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES

TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES

TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES

TITLE OF INVENTION NUMBER: US/09/810,671

CURRENT FILING DATE: 2001-06-08

NUMBER OF SEQ ID NOS: 5

SEQ ID NO 3

LENGTH: 21234

TURNET AND US SED ID NOS: 5

LENGTH: 21234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                         171 TGAAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAAGCAGTCC 230
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 21234;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
16.9%; Score 226; DB 3; I
Best Local Similarity 100.0%; Pred. No. 6.5e-60;
Matches 226; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Search completed: August 3, 2005, 19:44:07 Job time : 225.198 secs
                                                                                                                          1308 TCCTTTCTTTGACTTATTAAAA 1330
                                                                                                                                            241 TCCTTTCTTTGACTTATTAAAA 263
                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
CRGANISM: Human
US-09-810-671-3
                                                                                                                                                                                                          RESULT 15
US-09-810-671-3
                                                                      1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                 දු පු
           ò
                                   a
                                                                                                                               ઠે
                                                                                                                                                      a
```

Sequence 3, Appli Sequence 3, Appli Sequence 3, Appli Sequence 26212, A Sequence 11, Appli Sequence 1175, Ap Sequence 1175, Ap Sequence 1175, Ap Sequence 6110, Appl Sequence 6110, Appl Sequence 6121, Appl Sequence 121, Appl Sequence 238, Appl Sequence 24, Appl Sequence 24, Appl Sequence 22, Appl Sequence 24, Appl

OM nucleic

Run on:

Sequence:

```
Sequence 1, Application US/09810671
Publication No. US20020076783A1
GENERAL INFORMATION:
APPLICANT: YAW, Chunhua et al
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
FILE REFERENCE: CLO00758
CURRENT APPLICATION NUMBER: US/09/810,671
CURRENT FILING DATE: 2001-06-08
NUMBER OF SEQ ID NOS: 5
SOFTWARE: FastSEQ for Windows Version 4.0
SSEQ ID NO 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCAGCTGGGGTTACTTTAAAAACATGCTCCATGTGCATCCCTCTTGAAGCTTCGCACT
0S-09-905-999-26
0 US-10-825-177-26
0 US-10-825-177-26
0 US-10-9-810-671-3
3 US-10-109-854-3
5 US-10-109-854-3
6 US-10-109-856-3
8 US-10-109-856-3
9 US-10-10-139-612
1 US-10-10-139-17-1175
1 US-10-956-157-1175
1 US-10-956-157-1175
1 US-10-956-157-1175
1 US-10-956-157-9448
1 US-10-956-157-948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 2354;
llarity 100.0%; Pred. No. 0;
Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ALIGNMENTS
                                         1446
21234
21234
21234
21234
3040
1455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
     TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Simil
Matches 2354; C
 1097.4
1097.4
1097.2
1097.2
1097.1
1097
1097
1097
1097
1097
111.6
8111.6
8111.6
8111.6
768.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 2354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-810-671-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-810-671-1
                                                                                                                                                                                                                                                                 644.4
642.2
640.6
                                                                                                                                                                                                                                                                                                                                                                                        499.6
499.6
499.6
499.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481.2
464.4
464.4
                                                                                                                                                                                                                                                                                                                    640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -
                                                                                                                                                                                                                                                                                                                                                       633.
       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 26852, A
Sequence 135, App
Sequence 699, App
                                                                                                                      August 3, 2005, 18:57:31; Search time 1519.99 Seconds (without alignments) 10023.729 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                               Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Published Applications NA:*

1: /cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/2/pubpna/DS07_NEW_PUB.seq:*
3: /cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
4: /cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
5: /cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
7: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
8: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
12: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
13: /cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq:*
14: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
15: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
12: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
13: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
14: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
15: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/U
                                                                                                                                                                                                                                                                                                                                                       14575566
                   5.1.6
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-109-854-1
US-10-339-656-1
US-10-801-671-1
US-10-425-114-26852
US-10-267-502-135
US-10-641-643-699
                                                                                                                                                                                                                                                                                                                                                Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                   7287783 segs, 3236178273 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-810-671-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUMMARIES
                   GenCore version
Copyright (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                       nucleic search, using sw model
                                                                                                                                                                                                                                                              Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                      length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                           US-10-801-671-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2354
2354
2354
2354
4035
1446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0
100.0
100.0
100.0
81.1
54.6
                                                                                                                                                                                                                                                                                                                                                                                      Minimum DB seq
Maximum DB seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2354
2354
2354
2354
1908.4
1286
1178.2
                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                               Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score
```

Database

Sequence 134, App Sequence 1439, Ap Sequence 2256, Ap

61

8

셤

Result

GCCAGCTGGGGTTACTTTAAAAAACATGCTCCATGTGCATCCCTCTTGAAGCTTCGCACT

9 9

.. 0

DB 9; Length 2354; Indels

CTGTTGAAGAGGACACTCATCCCAGTCATTATTAGAAGCAAGGTCCTTGAATGAGCGAG 120

셤

Ω A	
à i	ATTATCGGGACCGGAGATACGTTGACGAATAC
qq	21 ATTATCGGGACCGGAGATACGIIGACGAAATACAGGAATGACTAGGGAACGGAAGGAAAAAAAA
ò 5	181 CTAGACATTAFCACAGAGACATTGAAGCGGGTATCGAATCCAGTGCAGTAATCTTCAG 2 
9 ;	81 CIAGACHIIAICACAGAGAACACACATAGAGAGAGAGAGAAGAGAGAGAGA
à A	241 TCCGCAGCAGGAGAAGCAGTCCTAAAAGGAAGCGCAATAGACACTGTTCAAGTCATCAGT 3
ò	01 CACGITCGAAGAGCCACCGAAGGAAAAGAICCAG
q	
λō	1 ACCTGATCTGTCAAAGTG
අු	1 ACCTGATCTGTCAAAGTGGAGGGCTTCTAAGAGGAAGATATGAAATCGTGGACA
ò	1 GTGAAGGAGCCTTTGGCAAAGTTGTA
Ор	i ĠrĠaaĠĠaĠĊĊrīrGGCaaaGrrGraGGCarrGarGGCargGCargCCargCarg
λΌ	1 TAGCAGTGAAAATCGTAAAAATGTAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCC
Dβ	1 TAGCAGTGAAAATCGTAAAAATGTAGGCCGTTACCGTGAAGCAGCTCGTTCA
ò	541 AAGTATTAGAGCACTTAAATAGTACTGATCCCAATAGTGTCTTCCGATGTGTCTCCAGATGC (
qq	1 AGTATTAGAGCACTTAAATAGTACTGATCCCAATAGTGTCTTCCGATGTGTC
ò	
qq	ı ragaarggrirgarcarcarggricargirricharrgrirgaacracrgggacrr
ò	661 CTTACGATTTCATTAAAGAAACACCTTTCTGCCATTTCAAATTGACCACATCAGGAGA
q <sub>0</sub>	cttacgatticattaaagaaaacagctttctgccatttcaaattgaccacatcagg
Ġ	
අු	1 rescerateabartereceaeteaataaattrittacateaataaattaaeceata
λō	ч
qa	CTGACTATGTAG
à	841 AAATGAAACGTGATGAACGCACACTGAAAAACACAGATATCAAAGTTGTTGACTTTGGAA
qa	1 AAATGAAACGTGATGAACGCACACTGAAAAACACAGATATCAAAG
ò	901 GIGCAACGIAIGAIGAAGAICAICACAGIACITIGGIGICIACCCGGCACIACAGAGCIC
qa	ATGAACATCACAGTACTTTGGT
ò	CCGAGGTCATTTTGGCTTTAGGTTGGTCTCAGCCTTGTGATGTTT
qa	ı ccdaddicairirddcirraggridg
λ	1 TTCTTATTGAATATTACCTTGGTTTC
qa	1 rrcrrarrgaararraccrrggrrrc
ò	GCAATGATGGAACGAATATTAGGA(
qa	ı rescaarsaresaacsaararrassa
λō	ACCATAACCAG
qaʻ	caca atatiticacca taacca getaga ii gaga taaaca gatetege
;	

 CATGATAGTAAAGAGCACC 1080

 TAGAATTCTATTAAATTTTAAGTGTTGTATTCTTTTTCATTGGGTGATGTCAGGGTGATA GATTITITIGAGTAAAGGAAATCITGACTACTITATATTCTTAAAGGAATATTCTTTA ATGTTAGGAGACGCTGCAAACCGTTGAAGGAATTTATGCTTTGTCATGATGAACATG AGAAACTGTTTGACCTGGTTCGAAGAATGTTAGAATATGATCCAACTCAAAGAATTACCT 8 8 8 4 2 4 2 4 8 B 8 B 8 ద 엄 g ò 6 6 6 6 6 8 8 8 6 6 6 6 6 6 

2281 TICCAGAATTTAATTGGTTACATAAACTTATTGA  2314 AACAAAAAAAAAC 2354  2314 AACAAAAAAAAAC 2354  2314 AACAAAAAAAAAC 2354  2314 AACAAAAAAAAAC 2354  ENDICATION NO. USZOOZOJJS48A1  APPLICATT YORA.  TITLE OF INVENTION: 1SOLATED HUMAN KINASE PROTEIN  TITLE OF INVENTION: 1SOLATED HUMAN KINASE PROTEIN  TITLE OF INVENTION: THEREOF  TOOLOGY SEQ. 10 0.0.19  TOOLOGY SEQ. 10 0.0.19  TOOLOGY SEG. 10 0.0.19  TOOLO	THATGATTGGTTACATAAACTTTTTGACTTCAGAAAAAAAAA	Db 1381 AGTGGTCTTACTATATACTTCTAGAAGAGTTACTTAGAAGACTTAGAACTTAAAA  Qy 1441 CATTCTAATATTTTTGTAACATTAAATTATTTTGTACAGTTAAGTGTAAATATTTGTACAGTTAAGTGTAAATATTTGTATG  Db 1441 CATTCTAATATTTTTTGTAAACATTAAATTATTTTGTACAGTTAAGTGTAAATATTGTATG  Qy 1501 TTTTGTATCAATAGCATAAACTTGATAAGTATAGTATAG	QY 1561 AAATTAAAATTATTTTTTTAAAATTACGTTATTTTTAAAATTAACTTTTTAAAATTAAATTTACGTTAAAATTAAATTAAATTAAATTAAATTAAATTAAATTAAATTAAATTAAATTATA
--	--	---	---

```
900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                              300
                                                                                                                                                                                   180
                                                                                                                                                                                                       240
                                                                                                                                                                                                                          240
                                                                                                                        120
                                                                                                                                           120
                                                                                                                                                               180
                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGCGTATCAGATCTGCCAGTCAATAAATTTTTACCATCATAATAAATTAACCCATACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                               CACGITICGAAGAGCCACCGAAGGAAAAGGATCCAGGAGTATAGAGGATGAGGAGGGTC
                                                                                                                        ATTATCGGGACCGGAGATACGTTGACGAATACAGGAATGACTACTGTGAAGGATATGTTC
                                                                                                                                                                          GCCAGCTGGGGTTACTTTAAAAACATGCTCCATGTGCATCCCTCTTGAAGCTTGGCACT
                                                                                              Gaps
                                                                ö
                                             Length 2354;
                                                                 Indele
                                               DB 15;
                                                                 ;
0
                                               100.0%; Score 2354;
100.0%; Pred. No. 0;
ative 0; Mismatches
                                                  Ouery Match
Best Local Similarity 100.
Matches 2354; Conservative
; LENGTH: 2354
; TYPE: DNA
; ORGANISM: Homo sapien
US-10-339-656-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                    61
                                                                                                                                                                                                               181
                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                          241
                                                                                                                                 61
                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                       6 B 6
                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                            음
장
음
                                                                                                                                                                                                                                                     8 8 8
                                                                                                                                                                                       8 8 8
                                                                                             g 8
                                                                                                                                 8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1, Application US/10339656

Sequence 1, Application US/10339656

Bublication No. US20030134319A1

GENERAL INFORMATION:
TITLE OF INVENTION: ACID MOLECULES ENCODING HUWAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
FILE REFERENCE: CLO00758D1V2

CURRENT APPLICATION NUMBER: US/10/339,656
CURRENT FILING DATE: 2002-04-01
PRIOR FILING DATE: 2002-04-01
PRIOR PILING DATE: 2001-03-19
PRIOR PILING DATE: 2001-03-19
PRIOR FILING DATE: 2001-03-19
PRIOR FILING DATE: 2001-03-19
PRIOR FILING DATE: 2001-03-19
RIOR FILING DATE: 2001-03-19
RIOR FILING DATE: 2001-03-19
SHOR FILING DATE: 2001-03-19
FRIOR FILING DATE: 2001-03-19
FRIOR FILING DATE: 2001-03-19
SHOR FILING DATE: 2001-03-19
FRIOR FILING DATE: 2001-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                       2100
                                                                                                                                                                                                                                                                                                                     2160
                                                                                                                                                                                                                                                                                                                                        2160
                                                                                                                                                                                                                                                          2040
                                                                                                                                                                                                                                                                                                2100
                                                                                                                                                                                                                                      2040
                                                                        1860
                                                                                                                                     1860
                                                                                                                                                      1980
                                                      1740
                                                                                                                                                                                                                                                                                                                  TAAATACGTAAACCTATAAGAATTAAGTTTATTAATTAGGCAATTTATGTCTGTGATAAT
                                                                                                                                                                                                                                                                                                                                                                      TCTTACCGGAGAAAGAGATTTGGAAAAGCAGTTTGGGAAGAAAGGTGCTGCTGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                               AACAAAAAAAAAAC 2354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2341
                                                                                                                                                                                                                                                                 1981
                                                                                                                                                                                                                                                                                                                                                                   2161
                                                                                                                                                                                                                                                                                                                                                                                                         2221
                                                                                                                                                                                                                                                                                    2041
                                                                                                                                                                                                                                                                                                        2041
                                                                                                                                                                                                                                                                                                                            2101
                                                                                                                                                                                                                                                                                                                                              2101
                                                                                                                                                                                                      1921
                                                                                                                                           1801
                                                                                                                                                               1861
                                                                                                                                                                                   1961
                                                                                                                                                                                                                          1921
                                                                                                                                                                                                                                              1981
                                                                                                                        1801
                                         1681
                                                             1681
                      1621
```

ద ò 셤 ò

셤 ò

요 양 원

8 8 8

g ò

8 8 8

Db 2041 TTCCAAGTATGTTGGTGAGTCACAGATATAAAATTCTGATGAGAGGTTTCAG 2100  Oy 2101 TTTTTAATACCAAGTCCTTAGGAGTCTTAACATTGGCCAGCATCTTTATCAAATGACA 2160  2101 TTTTTAATACCAAGTCCTTAGGAGTCTTAACATTGGCCAGCATCTTTATCAAATGACA 2160  2101 TTTTTAATACCAAGTCCTTAGGAGTCTTAACATTGGCCAGCATCTTATCAAATGACA 2160  Oy 2161 TAAATACGTAAACCTATAAGAATTAAGTTAATTAGGCAATTTATGCTGTGATAAT 2220  Oy 2221 TCTTACGGAGAAAGAGGATTTGATTGGAAAGCAGTTTAGGCAATTTATGTCTGTGATAAT 2220  Oy 2221 TCTTACGGAGAAAGAGGATTTGATTGGAAAGCAGTTTGGGAAGAAAAAAAA	RESULT 4  US-10-801-671-1  i Sequence 1, Application US/10801671  j Sequence 1, Application US/10801671  j Publication No. US20040152123A1  general INFORMATION:  j APPLICATY: YAN, Chunhua et al.  j TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES  j TITLE OF INVENTION: THEREOF  j TITLE OF INVENTION: UNMBER: US/10/801,671  current FILING DATE: 2000-08-24  prior APPLICATION NUMBER: 09/810,671  prior APPLICATION NUMBER: 09/810,671	Query Match         100.0%; Score 2354; DB 19; Length 2354;           Best Local Similarity         100.0%; Pred. No. 0;           Matches 2354; Conservative         0; Mismatches         0; Indels         0; Gaps           0y         1 GCCAGCTGGGGTTACTTTAAAAACATCCTCCATGGACTCCCTTGAAGCTTCGCACT         60           0y         61 CTGTTGAAGAGGACACTCATCCAGTCATTATTATAGAAGCTTCGCACT         60           0y         61 CTGTTGAAGAGGACACTCATCCAGTCATTATTATAGAAGCAAGGTCCTTGAATGACGAGG         120           0y         121 ATTATCGGGACCACTCATCCAGTCATTATTATAGAAGCAAGGTCCTTGAATGACGAGG         120           0y         121 ATTATCGGGACCGAGAATACGTTGACGAATGACTACTGTGAAGGATATGTC         180           0y         121 ATTATCGGGACCGGAGAATACGTTGACGGAATACAGGAATGACTACTGTGAAGGATATGTC         180           0y         121 ATTATCGGGACCGGAGAATTGAAAGGGGTATCGAATGACTACTGTGAAGGATTGTTC         180           0y         181 CTAGACATTATCACAGAGACTTCGAATCCATCCATCACTGCAGTAAATGTTC         180           0y         181 CTAGACATTATCACAGAGACTCCTAAAAGGAGTTCCATCATCATCTCAGT         300           0y         241 TCCGCAGCAGAAGACCCTAAAAGGAATCCAATAGACATCATCATCAGT         300           0y         301 CACGTTCGAAGAACACCTAAAAAGGAATAGACAATAGACATCAATCA
961 CCGAGGTCATTTTGGCTTTAGGTTGGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCA 1020	1321   TGGATGAAGCATTGCAGCATCCTTTTTATATAAAAAGAAATGAAATGGAATC   1380   1321   TGGATGAAGCATTGCAGCATCCTTTCTTTGACTTATTAAAAAAGAATGAAATGGAATC   1380   1381   AGTGGTCTTACTATATACTTCTTTTGTACTTATAGAATGGAATTGTAAA   1440   1441	1681   GATTTTTTTGGGTAAAGGAATCTTGACTACTTTATATTCTTAAGGAATATTCTTTA   1740     1681   GATTTTTTTTGGGTAAAGGAAATCTTGACTACTTTATATTCTTAAGGAATATTCTTTA   1740     1741   TATACTTCAAATTTAGAACTTAAATCTTTAAATTTCTTTGAAGGAATATTCTTTA   1740     1741   TATACTTCAAATTTAGAACTTAAAAGTTTTTCTTCTGTAATTGTTGAACGGGTG   1860     1741   TATACTTCAAATTTAGAACTTAAAGTTTTTCTTCTGTAATTGTTGAACGGGTG   1860     1801   ATTATTATAACTCTAGATAACTTTAAAAGTTTTTCTTCTGTAATTGTTACTGT   1860     1801   ATTATTATAACTCTAGATAAGCAGTACTAGAAACTCAGAAAATGTTTAACTGT   1860     1861   TAGAATTCTATTAAAGTTTTAAGGTACTTATTCATTGGGTGATGTTAGGGTGATA   1920     1861   TAGAATTCTATTAAAGTGTTGTATTTTTATTTAAAAACC   1980     1921   ACCAGACATTCATGGAAAGGCATGCAGTTTTTTTTTTTT

1411   CATTCHARTHTTTTTANACTATATATATATATATATATATATATATATAT	RESULT 5 US-10-425-114-26852 Sequence 26852, Application US/10425114 Publication No. US20040034888A1 GENERAL INFORMATION: APPLICANT: Liu, Jingdong
10. CACCUTCCAACACACACAACAAAAAAACACACAACAACACACAC	1321 TGGATGAAGCATTGCAGCATCCTTTTGACTTATTAAAAAGAAATGAAATGGAATC 1380

```
1417
                                                                                                                                                                                                                                                                                                 3205
                                                                                                                                                                                                                                                                                                                                                                                        1597
                                                                                                                                                                                                                                                                                                                                                                                                                   3325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3745
                                                                                                                                                                                3085
                                                                                                                                                                                                                                                                                                                                1537
                                                                                                                                                                                                                                                                                                                                                                                                                                                1657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3386 TACATGGAGGTCACCTCTGAAGTGATTTTTTTTTGAGTAAAAGGAAATCTTGACTACTTTA 3445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTCTGTAATTGTTGAACGGGTGATTATTAACTCTAGATAAGCAGGTACTAGAAACC 1837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2257
       2846 ACACATGATTCAGAAAACAAGAAAACGCAAGTATTTTCACCATAACCAGCTAGATTGGGA 2905
                                                                                                                                                                                                                                                                                                                                                                                     TACATGGAGGTCACCTCTGAAGTGATTTTTTTGAGTAAAAGGAAATCTTGACTACTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3746 AAGTCAGCTTGGAAAATGGACATTTCCAAGTATGTTTGGTGAGTCACAGATAAAAATA
                                                                                                             GCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAAGAATGTTAGAATA
                                                                                                                                                                                                                                                                     TAAGACTGTGTCAGTCAACTAAACATTCTAATATTTTTGTAAACATTAAATTTTTGTA
                                                                                                                                                                                                                                                                                     3146 TAAGACTGTGTCAGTCAACTAAACATTCTAATATTTTTGTAAACATTAAATTATTTTGTA
                                                                                                                                                                                                                                                                                                                                            3206 CAGTTAAGTGTAAATATTGTATGTTTTGTATCAATAGCATAATTAACTTGTTAAGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATTCTTAAAGGAATATTCTTTATATACTTCAAATTTAGAACTTAAACTTTAAAGTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3806 GAAATTCTGATGAGAGGTTTCAGTTTTTAATACCAAGTCCTTAGGAGTCTTAAACATTGGC
                                                   TGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGTTGAAGGAATTTAT
                                                                                            GCTTTGTCATGAAGAACATGAGAACTGTTTGACCTGGTTCGAAGAATGTTAGAATA
                                                                                                                                                    AAAAAAGAAATGAAATGGGAATCAGTGGTCTTACTATATACTTCTCTAGAAGAGATTACT
                                                                                                                                                                                                                            3086 AAAAAAGAAATGAAATGGGAATCAGTGGTCTTACTATATACTTCTCTAGAAGAGATTACT
                                                                                                                                                                                                                                                                                                                                CAGITAAGIGIAAATATIGIATGITITGIATCAATAGCATAATIAACTIGITAAGCAAGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTCTGTAATTGTTGAACGGGTGATTATTAATTAACTCTAGATAAGCAGGTACTAGAAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAACTCAGAAAATGTTTACTGTTAGAATTCTATTAAATTTTTAAGTGTTGTATTCTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAACTCAGAAAAATGTTTACTGTTAGAATTCTATTAAATTTTAAGTGTGTTGTATTCTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGACAGTTTGTTTAATAAAACCACATACACACTTTATTAAAGATTAAAATCTAACTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGTCAGCTTGGAAAATGGACATTTCCAAGTATGTTTGGTGAGTCACAGATATAAAAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAATTCTGATGAGGTTTCAGTTTTTAATACCAAGTCCTTAGGAGTCTTAACATTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGCATCTGTTTATCAAATGACATAAATACGTAAAACCTATAAGAATTAAGTTTAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3866 CAGCATCTGTTTATCAAATGACATAAATACGTAAACCTATAAGAATTAAGTTTAATAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGCAATTTATGTCTGTGATAATTCTTACGGGAGAAAGAGGATTTGATTGGAAAGCAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3926 AGGCAATTTATGTCTGTGATAATTCTTACGGGAGAAAGAGGATTTGATTGGAAAGCAGTT
                                                                 2906
                                                                                           1238
                                                                                                                                                      1298
                                                                                                                                                                                 3026
                                                                                                                                                                                                              1358
                                                                                                                                                                                                                                                                      1418
                                                                                                                                                                                                                                                                                                                                1478
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2198
                            8 &
                                                                                ♂
                                                                                                              ద
                                                                                                                                                    ò
                                                                                                                                                                        쉽
                                                                                                                                                                                                   욧. 뭐
                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
APPLICANT: Zhou, Yihua
APPLICANT: Kovalic, David K.
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERBNCE: 38-21(53313) B
CURRENT APPLICATION NUMBER: US/10/425,114
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 26852
LENGTH: 4035
                                                                                                                                                                                                                                                                                                                                                                         2185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1177
                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                       517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             997
                                                                                                                                                                                                                                                                                                                                                             AGATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAGTTGTAGAGTGCATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                     TGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTACTGATCCCAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAATAAATTTTTTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGAACGCACACTGAAAAACACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTTGGCTTTAGGTTGGTCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTACTGATCCCAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTCTTCCGATGTCCAGATGCTAGAATGGTTTGATCATCATGGTCATGTATTTGTATTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACAGCTTTCTGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAATAAATTTTTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2486 rcataataaattaacccatacagatctgaagcctgaaatartritgtraagtctga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTTGGTCTCAGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTTTCACAGTCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAGGACCCATACCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAGGACCCATACCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACACATGATTCAGAAAACAAGAAAACGCAAGTATTTTCACCATAACCAGCTAGATGGGA
                                                                                                                                                                                                                                                                                                                                                                                                      TCATGGCATGGATGCCATGCATGTAGCAGTGAAAATCGTAAAAAATGTAGGCCGTTACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACAGCTTTCTGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGAACGCACACTGAAAAACACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGAACATCACAGTACTTTGGT
                                                                                                                                                                                                                                                                                                                                            398 ATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGTGCATTGA
                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                     DB 18; Length 4035
                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                               1; Indels
                                                                                                                                                                                                                                        OTHER INFORMATION: Clone ID: LIB4654-056-G4_FLI
                                                                                                                                                                                                                                                                                  Score 1908.4;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 99.9%;
Matches 1909; Conservative (
                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                        US-10-425-114-26852
                                                                                                                                                                                                                                                                                                                                                                                                    458
                                                                                                                                                                                                                                                                                                                                                                                                                                 2186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             938
                                                                                                                                                                                                                            FEATURE:
```

g

ò

유

õ

g

රු පු

ò

6 B 6

임

ઠે a g

8

ઠે

යු

8 8

õ

8 & 8

ò

ò 셤

```
1300
                                                                                                                                                                                                                                                    1180
                                                                                                                                                                                                                                                                                                                                                                              1060
                                                                                                                                                                                                       1120
                                                                                                                                                                                                                              1104
                                                                                                                                                                                                                                                                          1164
                                                                                                    940
                                                                                                                                     984
 804
                     880
                                            864
                                                                                         924
                                                                                                                                                                                                                                              1165 AGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGT
                                                                                                                                                                                                                                                                                                                                 TGAAGGAATTTATGCTTTGTCATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAA
                                                                                                                                                                                 GGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTT
                                                                                                                                                                                                                                                                          GACCCATACCACAACACATGATTCAGAAAACAAGAAACGCAAGTATTTTCACCATAACC
                                                                                                                                                                                                                              TCACAGTCTTTCAGACTCATGATAGTAAAGACCACCTGGCAATGATGGAACGAATATTAG
                                                                                                                                                                                              TTGTGAAGTCTGACTATGTAGTCAAATATTGTAAAATGAAAGGTGATGAAGGCACAC
                                                          tgaaaacrcagatatcaagttgttgactttggaagtgcaacgtatgatgatgaacatc
                                                                                                                                     ACAGIACITIGGIGICIACCGGCACIACAGAGCICCGGAGGICATITIGGCTITAGGIT
                                                                                                                                                 TAAAITTITTACATCATAAATTAAACCCATACAGATCTGAAAGCCTGAAAATATTTGT
             BLOOD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 94304

COMPUTER READABLE FORM:
    MEDIUM TYPE: FlOPDY disk
    COMPUTER: IBM PC compatible
    COMPUTER: IBM PC compatible
    COMPUTER: IBM PC compatible
    COMPUTER: Word Perfect 6.1 for Windows/MS-DOS
    SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS
    SOFTWARE: Word Perfect
    CURRENT APPLICATION NUMBER: US/10/641,643
    FILING DATE: 14-Aug-2003
    CLASSIFICATION CANKNOWN>
    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DETECTION OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1345 ICTTIGACTTATAAAAAGAAAIGA 1370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 699, Application US/10641643
; Publication No. US20040077003A1
GENERAL INFORMATION:
Susan G. Stuart
Jeffrey, J. Seilhamer
Jeffrey, Composition FOR
TITLE OF INVENTION:
GENE EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 7
US-10-641-643-699
                                                                                                                                                                                                                                                           1121
                                                                                                                                                                                                                                                                                                        1181
                                                                                                                                                                                                                                                                                                                                                                           1225
                                                                                                                                              925
                                                                                                                                                                  1001
                                                                                                                                                                                           985
                                                                                                                                                                                                                                      1045
                                                                                                                                                                                                                                                                                  1105
                                                                                                 865
        745
                                                    805
                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                          용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                   중염
                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                           ò
                                                                                                                  g
                                                                                                                                        상염
                                                                      g
                                                                                                 Ś
                          g
                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  760
                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTG 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAGAGTGCATTGATCATGGCATGGATGGCATGTAGCATGTAAAAATCGTAAAAATG 504
                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAGATCCAGGAGTATAGAGGATGATGAGGAGGTCACCTGATCTGTCAAAGTGGAGACG 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAAGCAGTCCTA 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 324
                                                                                                                                                                                                                                                                                                                                              144
                                                                                                                                                                                                                                                                                                                                                                                        ACGAATACAGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTG 204
                                                                                                                                                                                                                                                                                                                                                                                                              280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CIGATCCCAATAGIGICTICCGAIGGICCAGAIGCTAGAAIGGITIGAICATCATGGIC (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAGGCCGTTACCGTGAAGCAGCTCGTTCAGAATCCAAGTATTAGAGCACTTAAATAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGTTTGTATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGGAAGCGCAATAGACACTGTTCAAGTCATCAGTCACGTTCGAAGAGCCACCGAAGGA
                                                                                                                                                                                                                                                                                                                                            GTCATTATTTAGAAGGAAGGTCCTTGAATGAGCGAGATTATCGGGACGGGAGATACGTTG
                                                                                                                                                                                                                                                                                                                         Gaps
                                   ..
                                                                                                                                                                                                                                                                                                 Length 1446;
                        Indels
                                                                                                                                                                                                                                                                                                  Query Match 54.6%; Score 1286; DB 18; Best Local Similarity 100.0%; Pred. No. 1.8e-255; Matches 1286; Conservative 0; Mismatches 0;
                                                                                RESULT 6
US-10-267-502-135
Sequence 135, Application US/10267502
Sequence 135, Application US/10267502
Publication No. US20040071700A1
GENERAL INFORMATION:
APPLICANT: Galant, Ron
TITLE OF INVENTION: Obesity Linked Genes
FILE REFERENCE: LSD-07416
CURRENT APPLICATION NUMBER: US/10/267,502
CURRENT FILING DATE: 2003-01-27
CURRENT FILING DATE: 2003-01-27
SOFTWARE: PatentIn version 3.2
                                                                                                                                                                                                                                                          TYPE: DNA
CORGANISM: Homo sapiens
US-10-267-502-135
                                                                                                                                                                                                                                    SEQ ID NO 135
LENGTH: 1446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    191
                                                                                                                                                                                                                                                                                                                                                                                               145
                                                                                                                                                                                                                                                                                                                                                                                                                                            205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        461
                                                                                                                                                                                                                                                                                                                                                    82
                                                    3986
```

g

g ò

ò

엄 ò ద ò g

ò

g

8 8 à g

ò

8 6 ò g ò g

```
APPLICANT: ULLRICH, Axel
TITLE OF INVENTION: CLK PROTEIN KINASES AND RELATED PRODUCTS AND METHODS
FILE REFERENCE: 038602/0431
CURRENT APPLICATION NUMBER: US/09/905,999
CURRENT FILING DATE: 199-07-31
PRIOR FILING DATE: 199-07-31
PRIOR PILING DATE: 199-06-17
PRIOR PLING DATE: 1997-06-17
PRIOR APPLICATION NUMBER: US 08/877,150
PRIOR APPLICATION NUMBER: US 60/034,286
PRIOR PILING DATE: 1997-06-17
PRIOR PILING DATE: 1997-06-17
PRIOR PILING DATE: 1997-06-17
SPRIOR PILING DATE: 1997-06-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1401
                                                                                                                                                                                      1901
                                                                                                                                                                                                                                                                                                                       1221
                                                                                                                                                                                                                                                                                                                                                                    2021
                                                                                                                                                                                                                                                                                                                                                                                                                                                          2081
                                                                                                                       TGTAATTGTTGAACGGGTGATTATTAATTAATCTCTAGATAAGCAGGTACTAGAAACAAAA 1101
                                                                                                                                                                                                              CTCAGAAAATGTTTACTGTTAGAATTTCTATTAAATTTTAAGTGTTGTATTCTTTTCATT 1161
                                                                                                                                                                                                                                                                                                                                                                                                              1281
                                                                                                                                                                                                                                                                             1902 GGGTGATGTCAGGGTGATAACCAGACATTCATGGAAAGGCATGCAGTTTGTCCATTGTGA 1961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Grcactartragaagcaagargcrrgaargaagagarrarcgggaccggagaracarrg 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      299 ATGAATACAGAAATGACTACTGCGAAGGATATGTTCCAAGACATTACCATAGAGACGTTG 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAGAAGCAGTCCTA 264
                                                                                                                                                                                                                                                                                                    GGGTGATGTCAGGGTGATAACCAGACATTCATGGAAAGGCATGCAGTTTGTCCATTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTAAAGGAATATTCTTTATATACTTCAAATTTAGAACTTAAACTTTAAAAGTTTTTCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTCTGATGAGAGGTTTCAGTTTTTAATACCAAGTCCTTAGGAGTCTTAACATTGGCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         145 ACGAATACAGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCTGATGAGAGGTTTCAGTTTTTAATACCAAGTCCTTAGGAGTCTTAACATTGGCCAGC
                                                                                                                                                                                      CTCAGAAAATGTTTACTGTTAGAATTCTATTAAATTTTTAAGTGTTGTATTCTTTTTCATT
                                                                                                                                                                                                                                                                                                                                                                    CAGITIGITIAAIAAAACCACATACACACITIAITIAAGAIIAAAAICIAACIGGAAAGI
                                                                                                                                                                                                                                                                                                                                                                                              CAGTITICITITAATAAAACCCACATACACACTTTATTTAAGATTAAAATCTAACTGGAAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2142 ATCTGTTATCAAATGACATAAATACGTAAACCTATAAGAATTAAGTTTATTAAT 2196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCATTATTTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTG
                                                                                                  TGTAATTGTTGAACGGGTGATTATTATTAACTCTAGATAAGCAGGTACTAGAAACCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCTGTTTATCAAATGACATAAATACGTAAAACCTATAAGAATTAAGTTTATTAAT 1456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 1549,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
46.6%; Score 1097.4; DB 9;
Best Local Similarity 90.6%; Pred. No. 1.8e-216;
Matches 1170; Conservative 0; Mismatches 121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Sequence 26, Application US/09905999; Patent No. US20020106771A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ) ORGANISM: Mus musculus
US-09-905-999-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-905-999-26
                                                                                                                                          1042
         1722
                                                     982
                                                                                                1782
                                                                                                                                                                                      1842
                                                                                                                                                                                                                                   1102
                                                                                                                                                                                                                                                                                                                          1162
                                                                                                                                                                                                                                                                                                                                                                      1962
                                                                                                                                                                                                                                                                                                                                                                                                                1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                             2022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                         셤
                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                          셤
                                                                             ઠે
                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGTGTAAATATTGTATGTTTTGTATCAATAGCATAATTAACTTGTTAAGCAAGTATGGT 1542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAGGACCCATACCACAACACA 1122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGTTGAAGGAATTTATGCTTT 1242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTCATGATGAAGAACATGAAAACTGTTTGACCTGGTTCGAAGAATGTTAGAATATGATC 1302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGAAATGAAAATGGGAATCAGTGTCTTACTATACTTCTCTAGAAGAGATTACTTAAGA 1422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGTGTCAGTCAACTAAACAFTCTAATATTTTTGTAAACATTAAATTATTTTTGTACAGTT 1482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATACCTITGAAATATCCTITGTGTCCAGTGATAAATGTGATTGATCTTGCCTTTTGTACA 1661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGAGGTCACCTCTGAAGTGATTTTTTTGAGTAAAAGGAAATCTTGACTATTATATT 1721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGITCIGCTGGTAGATAIGTTAGGAGACGCTGCAAACCGTTGAAGGAATTTATGCTTT 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       262 rGradodearaderrecerretratreaaratracerregrireaearerreaeare 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGATTCAGAAAACAAGAAAACGCAAGTATTTTCACCATAACCAGCTAGATTGGGATGAAC 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGTGTAAATATTGTATGTTTTGTATCAATAGCATAATTAACTTGTTAAGCAAGTATGGT 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             802 CTTGATAATGCATTAGAAAAATTAAAATTTAATTTTCTTTTTGAAATTATCCATTTTTAA 861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGAAATGAAATGGGAATCAGTGGTCTTACTATATACTTCTCTAGAAGAGATTACTTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGTGTCAGTCAAACATTCTAATATTTTTGTAAACATTAAATTATTTTGTACAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGATTCAGAAAACAAGAAAACGCAAGTATTTTCACCATAACCAGCTAGATTGGGATGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 18; Length 1456;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTTTCACAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                50.1%; Score 1178.2; DB 18; Lengt
99.7%; Pred. No. 3.5e-233;
tive 0; Mismatches 3; Indels
APPLICATION NUMBER: «Unknown»
PILING DATE: «Unknown»
ATTORNEY, AGENT INPORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0001 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555
TELEPAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 699:
SEQUENCE CHARACTERISTICS:
LENGTH: 1456 base pairs
TYPE: nucleic acid
STARANDEDNESS: single
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                     us
                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE DESCRIPTION: SEQ ID NO: 699
                                                                                                                                                                                                                                                                                                                                                                    LIBRARY: HNT2AGT01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                              CLONE: 488842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
Matches 1191; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-641-643-699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
```

셤 ò 요 요 g g

8 6 à 6 8 8

g ò ద ठे g 8 6 ઠે 셤 ઠે

```
RESULT 9

105-10-825-177-26

105-10-825-177-26

1 Sequence 26, Application US/10825177

1 Publication No. US20040259220A1

2 Publication No. US20040259220A1

3 APPLICANT: ULLRICH, Axel

3 APPLICANT: ULLRICH, Axel

3 APPLICANT: ULLRICH, Axel

4 TITLE OF INVENTION: CLK PROTEIN KINASES AND RELATED PRODUCTS AND METHODS

7 TITLE OF INVENTION: CLK PROTEIN US/10/825,177

7 CURRENT APPLICATION NUMBER: US/09/905,999

PRIOR PLING DATE: 2004-0-16

PRIOR PLING DATE: 1999-07-31

PRIOR PLING DATE: 1999-07-31

PRIOR PLING DATE: 1999-07-31

PRIOR PLING DATE: 1997-06-17

PRIOR PLING DATE: 1996-12-19

NUMBER: OF SEQ ID NOS: 26

SEQ ID NO 26

LENGTH: 1549

LENGTH: 1549

LENGTH: 1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGATCCCAATAGTGTCTTCCGATGTGCTAGAATGGTTTGATCATCATGGTC 624
1439 GAATGTTGGAGTATGACCCAGGGAGAAGGATCACCTTGGATGAAGCATTGCAGCACCCCT 1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aaagatccaggagtataagagatgatgaggaggtcacctgatctgtcaaagtggagacg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          205 AAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAGAAGCAGTCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   145 ACGAATACAGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                           265 AAAGGAAGCGCAATAGACACTGTTCAAGTCATCAGTTCGAAGAAGAAGGA
                                                                                                                                                                                                                                                                                                                                                                            85 GTCATTATTTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTG
                                                                                                                                                                                                                                                                                                                                        DB 20; Length 1549;
                                                                                                                                                                                                                                                                                                                                         Score 1097.4; DB 20; Lengt
Pred. No. 1.8e-216;
0; Mismatches 121; Indels
                     TCTTTGACTTATTAAAAAAAAATGAAATGG 1375
                                      1499 retricactitàtrabaaagaaardagrege
                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 90.6%;
Matches 1170; Conservative
                                                                                                                                                                                                                                                                                                     ; TYPE: DNA
; ORGANISM: Mus musculus
US-10-825-177-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               599
                           1345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ፟
                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                          유
          셤
                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAIGTIAGAAIATGAICCAACTCAAAGAATTACCTTGGAIGAAGCAITGCAGCAICCTT 1344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGAAGGAATTTATGCTTTGTCATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAA 1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGAGGCTGGAAACGGT 1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTT 1044
                                                                                                                                                                                                                                                                                                                                                                                                                            ACAGIACITIGGIGICIACCCGGCACIACAGAGCICCCGAGGICATITIGGCITIAGGIT 984
                                                                                                                                                                                                                                                                                                                                                                                                                 865 TGAAAAACACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGAACATC 924
                                                                                                                                                                                                                                                                                                                                                     TTGTGAAGTCTGACTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGAACGCACAC 864
                                                                                                                                                                                                                                                                            804
                                                                                                                                                                                        564
                                                                                                                                                                                                          718
                                                                                                                                                                                                                            624
                                                                                                                                                                                                                                       ATGITIGIATIGIATITGAACTACTGGGACTTAGTACTTACGATITCATTAAGAAAACA 684
                                                                                                                                                                                                                                                                                                      744
                                                                                                                                                                      658
                                                                                             538
                                                                                                                444
                                                                                                                          504
                                                         478
                                                                            384
                                        324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCACAGICTITCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACCCATACCACACACATGATTCAGAAAACAAGAAAACGCAAGTATTTTCACCATAACC
                                                                                                                                                                                                                                                                                                     GCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGCCGTATCAGATCTGCCAGTCAA
                                                                                                                                                                                                                                                                                                                                          TAAATTITITACATCATAATTAAATTAACCCATACAGATCTGAAGCCTGAAAATTTTTGT
                                                                                                                                                    TAGGCCGTTACCGTGAAGCAGCTCGTTCAGAATCCAAGTATTAGAGCACTTAAATAGTA
                                                                                                                                                                                                  croancecaaragererrecearerereceacearerererereseare
                                                                                                                TTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTG
                                                                            AAAGATCCAGGAGTATAGAGGATGATGAGGAGGTCACCTGATCTGTCAAAGTGGAGAGG
                                                                                      AAAGGAAGCGCAATAGACACTGTTCAAGTCATCAGTCACGTTCGAAGGAGCCACCGAAGGA
          1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1259
                                                                                                                                                                                                                                                                                                                                                                                                                                                              925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  985
                                                                                                                                                                                                                                                                                                                              839
                                                                                                                                                                                                                                                                                          119
                                                                                                                                                                                                                                                                                                             685
                                                                                                                                                                                                                                                                                                                                                 745
                                                                                                                                                                                                                                                                                                                                                                                     805
                                                                                                                                                                                                                                                                        625
                                                                                                    479
                                                                                                                                                                                                                                    265
                                                                                                                                          539
                                                                                                                                                           445
                                                                                                                                                                              599
                                                                                                                                                                                                 505
                                                                                                                                                                                                                  629
                                                                                   325
                                                                                                                       385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                      승
음
                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                  8 8 8
                                                                                                                                                                                                                                                                                                         6 8 6
                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                            8 8 8
                                                                                                                                     음
장
음
                                                                                 ठे हे ठ
                                         ઠ
                                                            셤
```

ö

ö

298

598 504 658 564

538 444

478

384

358 264 418 324

ö 144 400 384 460

280 264 340 324 520

504

624 700 684 744

804 880 864

444

```
941 TGAAAAACACAGATATCAAAGTTGTTGTAGAAGTGCAACATATGACGACGACGACATC 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCACAGTCTTTCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAG 1104
                                                                                                         TAGAGTGCATTGATCACGGCATGGATGGCTTACATGTAGCACTGAAAATTGTAAAAAATG 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAGGACGTTACCGGGAGGCACCTCGTTCTGAAATCCAAGTATTGGAGCACTTGAACAGCA 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTTTTCTGCCATTTCAAATTGATCACATCAGGCAAATGGCTTATCAGATCTGCCAGTCTA 820
                                                                                                                                             145 ACGAATACAGGAATGACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTG 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AIGITICIALITAGACTICGCIGCACCTAAGAACAAATA 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  881 TTGTGAAGTCTGACTATGTAGTCAAATACAATTCTAAAATGAAACGAGATGAGCGCACAT 940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTA 564
                                                                                                                                                                                                                             TTCTAAGAGCAAGATATGAAATCGTGGACACTTTAGGTGAAGGAGCCTTTGGCAAAGTTG
                                                                                                                                                              221 ATGAATACAGAAATGACTACTGCGAAGGATATGTTCCAAGACATTACCATAGAGACGTTG
                                                                                                                                                                                                                                                                           AAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAGTGGAGACG
                                                                                                                                                                                                                                                                                                                                                                           TTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                    TAGAGTGCATTGATCATGCATGGATGCCATGTAGCAGTGAAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAGAAGCAGTCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGITTGTATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAAATTTTTTACATCATAATAAATTTAACCCATACAGATCTGAAGGCTGAAAATATTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      821 TAAATTTTTACATCATAATAAATTAACACACGGGACCTAAAACCTGAAATATTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTGTGAAGTCTGACTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGAAGGCGCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1001 ATAGTACTTTGGTGTCCACAAGGCACTACAGGCTCCAGAGGTCATTTTGGCTCTAGGTT
                                                                                       GTCATTATTTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTG
                                                                                                                                                                                                                                                             AAAGGAAGCGCAATAGACACTGTTCAAGTCATCAGTCACGTTCGAAGAGCCACCGAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGATCCCAATAGTGTCTTCCGATGTCCAGATGCTAGAATGGTTTGATCATGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGACCCCAACAGTGTCTTCCGATGCGTCCAGATGCTAGAGTGGTTTGATCATCATGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         865 TGAAAAACACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGAACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 925 ACAGTACTTTGGTGTCTACCCGGCACTACAGAGCTCCCCGAGGTCATTTTGGCTTTAGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTT
                                                            Gape
                                Length 1446;
                                                            ö
                            Score 1097.2; DB 18; Lengt
Pred. No. 1.9e-216;
0; Mismatches 118; Indels
                               46.6%;
                                                            Conservative
                                              Best Local Similarity
Matches 1168; Conserv
    US-10-267-502-138
                                                                                         82
                                                                                                                                                                                                     205
                                                                                                                                                                                                                                                             265
                                                                                                                                                                                                                                                                                                                    325
                                                                                                                                                                                                                                                                                                                                               401
                                                                                                                                                                                                                                                                                                                                                                           385
                                                                                                                                                                                                                                                                                                                                                                                                        461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1045
                                                                                                                                                                                                                                                                                                                                                                                                                                     445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  805
                                Query Match
                                                                                                               용
                                                                                                                                             ઠે
                                                                                                                                                                   셤
                                                                                                                                                                                                    ò
                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                 임
                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                임
                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ရူ
                                                                                                                                                                                                                                                                                                                                                           1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1378
                                                                                                                                                                                                                                 TTGTGAAGTCTGACTATGTAGTCAAATACAATTCTAAAATGAAAGGAGATGAGGCGCACAT 1018
                                                                                                                                                                                                                                                                                          TAAAGGAATTTATGCTGTGTCATGACGAAGAGCATGAGAAGCTGTTTGACCTGGTTCGAA 1438
                                                                                                                                                                                                                                                                                                                                                                                         GGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATATTGAATATTACCTTGGTT 1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCACAGTCTTTCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAGGAACGAATATTAG 1104
                                                                                                                                                                         TAPATITITIACATCATAATAAATTAACACACGGACCTAAAACCTGAAAATATITITAT 958
                                                                                                                                                                                                                                                                           924
                                                                                                   GCTTTCTGCCATTCAAATTGACCACATCAGCAGATGGCGTATCAGATCTGCCAGTCAA 744
                                                                                                                                                           804
                                                                                                                                                                                                                  TIGIGAAGICIGACIAIGIAGICAAAIAIAAITCIAAAAIGAAACGIGAIGAACGCACAC 864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCACAGTCTTTCAGACCCACGATAGTAAAGAGCACCTGGCAATGATGGAGCGGATCTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACCCATACCACAACACATGATTCAGAAAACAAGAAAACGCAAGTATTTTCACCATAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTTTCTGCCATTTCAAATTGATCACATCAGGCAAATGGCTTATCAGATCTGCCAGTCTA
                                                                                                                                                                                                                                                                         TGAAAAACACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGAACATC
                                                                                                                                                                                                                                                                                                                                                  ATAGTACTTTGGTGTCCACAAGGCACTACAGGGCTCCAGAGGTCATTTTGGCTCTAGGTT
                                                                                                                                                                                                                                                                                                                                                                                                        ATGITTGTATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACA
                                                                                                                                                          TAAATTTTTTACATCATAATAAATTAACCCATACAGATCTGAAGCCTGAAAATATTTTGT
                                                                                                                                                                                                                                                                                                                                  ACAGTACTTTGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAATGTTAGAATATGATCCAACTCCAAAGAATTACCTTGGATGAAGCATTGCAGCATCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTTTGACTTATAAAAAGAAATGAAATGG 1375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 138, Application US/10267502
; Sequence 138, Application US/10267502
; Publication No. US20040071700A1
; GENERAL INFORMATION:
    APPLICANT: Kim, Jaeeeob
; APPLICANT: Galant, Ron
; TITLE OF INVENTION: Obesity Linked Genes
; FILE REFERENCE: LSD-07416
; CURRENT APPLICATION NUMBER: US/10/267,502
; CURRENT FILING DATE: 2003-01-27
; NUMBER OF SEQ 1D NOS: 439
; SOOFWARE: PatentIn version 3.2
; SEQ 1D NO 138
LENGTH: 1446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                      1019
                                                                                                                                                                                                                                                                                                                                                           1079
                                                                                                                                                                                                                                                                                                                                                                                       985
                                                                                                                                                                                                                                                                                                                                                                                                                   1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1499
                                                                       779
                                                                                                   685
                                                                                                                              839
                                                                                                                                                                                      899
                                                                                                                                                                                                                  805
                                                                                                                                                                                                                                             959
                                                                                                                                                                                                                                                                         865
                                                                                                                                                                                                                                                                                                                                  925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ठे है ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                8 6 8 6 8 6
                                                                                                                                                                                                           6 6 6
                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                               6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            કે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 &
```

1060 1044

984

09   1648   TIGCCTTTTGTACATGGAGGTCACCTCTGAAGTGATTTTTTTGAGTAAAAGGAAATCTT   1707	Db 18858 TTTGTCCATTGTGCAAATGACAATTCCAAGTATGTTTGGTGAGTCACAGA 2067  Oy 2008 TCTAACTGGAAAGTCAGCTTGGAAATGGACATTTCCAAGTATTTTGGTGAGTCACAGA 18977  18918 TCTAACTGGAAATCTGAAAATGGACATTTCCAAGTATTTTGTTTG	RESULT 12 US-10-109-854-3 is Sequence 3, Application US/10109854 j Bequence 3, Application US/10109854 j Publication No. US20020119548A1 gENERAL INFORMATION: GENERAL INFORMATION: TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES TITLE OF INVENTION: THEREOF; TITLE OF INVENTION: THEREOF; TITLE OF INVENTION: THEREOF; TITLE OF INVENTION: THEREOF; GURRENT APPLICATION NUMBER: 60/227,470 PRIOR FILING DATE: 2000-08-24 j PRIOR FILING DATE: 2001-03-19 NUMBER OF SEQ ID NOS: 5 sOFTWARE: FastSEQ for Windows Version 4.0 seg ID NO 3 LENGTH: 21234 TYPE: DNA TYPE: DNA TYPE: DNA US-10-109-854-3
OY 1105 GACCCATACCACACACACATGATTCAGAAACAAGAAACGCAAGTATTTCACCATAACC 1164  Db 1181 GACCCATCCCAGCACATATGATCCAGAAGGAAACGCAAGTATTTCCACCATAACC 1240  1181 GACCCATCCCAGCACATATGATCCAGAAGGAAACGCAAGTATTTCCACCATAACC 1240  OY 1165 AGCTAGATTGGGATGAACACATCTGCTGGAAACGCTGCAAACCGT 1224  OY 1225 TGAAGGAATTTATGCTTTGTCATGATGACAGAGATTTTGGACGCTGCAAGCCGT 1300  Db 1241 AGCTAGAATTATGCTTTGTCATGATGAAGAAGATTTGACCTGGTTCGAA 1284  OY 1225 TGAAGGAATTTATGCTTTGTCATGAAGAAGAAGATTGACTTTGACCTGGTTCGAA 1360  Db 1301 TAAAGGAATTTATGCTTTGACAAAGAAAAAGAAAGCATTGCAACCTTTGAACACTTGCAAGAAGATTTATGCTTGTGAAGAATTACCTTGAAGAAAAAAAA	JLT 11 29-810 belieac belieac APPLICA TITLE TITLE TITLE TITLE TITLE TITLE TITLE TITLE TYPE ORGA ORG	Db 18138 AGGAATTTATGCTTGATGAATTACCTTGGATGAAGCATTGCAGCTCTTTCT 1347  0y 1288 TGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAGCACCTTTCT 1347  18198 TGTTAGAATATGATCCAACTCAAGAATTACCTTGGATGAAGCATTGCAGCACTTCTTCT 18257  18198 TGTCTTATTAAAAAAGAATGAAATGGGAATCAGTGGTCTTACTATATATCTTCTTTTT 18257  18258 TTGACTTATTAAAAAAGAATGAAATGGGAATCAGTGGTCTTACTATATATTTTTTTAAAATAA 18317  18318 AGGATTACTTAAGAATGAATGAAATGGAAATCATAAAATTTTTTTT

ò

```
Sequence 3, Application US/10339656
| Publication No. US20030134319A1
| GENERAL INFORMATION: US20030134319A1
| GENERAL INFORMATION: US20030134319A1
| TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, AND USES
| TITLE OF INVENTION: THEREOF
| TITLE OF INVENTION: UNGERE: US/10/339,656
| TITLE OF INVENTION: UNGER: US/10/339,656
| CURRENT FILING DATE: 2003-01-10
| PRIOR APPLICATION NUMBER: 09/810,671
| PRIOR FILING DATE: 2001-03-19
| PRIOR FILING DATE: 2001-03-19
| PRIOR FILING DATE: 2000-08-24
| NUMBER OF SEQ ID NOS: 5
| SEGTHARE: FastSEQ for Windows Version 4.0
| SEQ ID NO 3
             18257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTATTTTGTACAGTTAAGTGTAAATATTGTATGTTTTTGTATCAATAGCATAATTAACTTG 18437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18258 TTGACTTATTAAAAAAGAAATGAAATGGGAATCAGTGGTCTTACTATATACTTCTCTAGA 18317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGAGATTACTTAAGACTGTGTCAGTCAACTAAACATTCTAATATTTTTGTAAACATTAAA 18377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1467
 2307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18138 AGGAATTTATGCTTTGTCATGAAGAACATGAGAACTGTTTGACCTGGTTCGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGACTTATTAAAAAAGAAATGAGAATCAGTGGTCTTACTATATACTTCTTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18198 TGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAGCATCCTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGAGATTACTTAAGACTGTGTCAGTCAACTAAACATTCTAATATTTTTGTAAACATTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTATTTTGTACAGTTAAGTGTAAATATTGTATGTTTTGTATCAATAGCATAATTAACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTACCATTTTTAAATACCTTTGAAATATCCTTTGTGCCCAGTGATAAATGTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACTACTTTATATTCTTAAAGGAATATTCTTATATACTTCAAATTTAGAACTTAACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1228 AGGAATTTATGCTTTGTCATGATGAGAACATGAGAAACTGTTTGACCTGGTTCGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAGCATCCTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match

Query Match

Best Local Similarity 100.0%; Pred. No. 7.3e-216;

Matches 1097; Conservative 0; Mismatches 0; Indels 0;
                                                                        19218 AAACTTTTTGACTTCAG 19234
                                                 AAACTTTTGACTTCAG 2324
                                                                                                                                                                                                                                                                                                                                                                                                   ; TYPE: DNA
; ORGANISM: Homo sapien
US-10-339-656-3
                                                                                                                           US-10-339-656-3
                                                 2308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1708
                g
                                                8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                           TATAAAAATTGTGTGATGAGAGGTTTCAGTTTTTAATACCAAGTCCTTAGGAGTCT 19037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTAACTGGAAAGTCAGCTTGGAAAATGGACATTTCCAAGTATGTTTGGTGAGTCACAGA 18977
                                                            1287
                                                                                                                                                                  1407
                                                                                                                                                                                                                                                                                                                                                                                                                             1707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2187
                                    ö
                                                                                                            1288 TGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAGCATCCTTTCT 1347
                                                                                                                                                                                                                                                                   TTATTTTGTACAGTTAAGTGTAAATATTGTATGTTTTGTATCAATAGCATAATTAACTTG 1527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACTAGAAACCAAAAACTCAGAAAATGTTTACTGTTAGAATTCTATTAAATTTTAAGTGTTG 1887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATTCTTTTCATTGGGTGATGTCAGGGTGATAACCAGACATTCATGAAAGGCATGCAG 1947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2067
                                                                                                                                                                             TTGACTTATTAAAAAAGAAATGAAATGGGAATCAGTGGTCTTACTATATACTTCTCTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTGTCCATTGTGACAGTTTGTTTAATAAAACCACATACACACTTTATTAAGATTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATTCTTTTTCATTGGGTGATGTCAGGGTGATAACCAGACATTCATGGAAAGGCATGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTAACTGGAAAGTCAGCTTGGAAAATGGACATTTCCAAGTATGTTTGGTGAGTCACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATAAAATTGAGAAATTGATGAGGGTTTCAGTTTTTAATACCAAGTCCTTAGGAGTCT
                                                            1228 AGGAATTTATGCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                             TAACATTGGCCAGCATCTGTTTATCAAATGACATAAATACGTAAAACCTATAAGAATTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITATTAATTAGGCAATTTATGTCTGTGATAATTCTTACGGGAGAAAGAGGGATTTGATTG
                                     Gaps
                                    ö
          Length
                                  Indels
        Query Match 46.6%; Score 1097; DB 13; Best Local Similarity 100.0%; Pred. No. 7.3e-216; Matches 1097; Conservative 0; Mismatches 0;
                                                                                                                                                                1348
                                                                                                                                                                                                                                                                                           18378
                                                                                                                                                                                                                   1408
                                                                                                                                                                                                                                                                    1468
                                                                                                                                                                                                                                                                                                                      1528
                                                                                                                                                                                                                                                                                                                                                                         1588
                                                                                                                                                                                                                                                                                                                                                                                                                             1648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2128
                                                                                                                                      8198
                                                                                                                                                                                                                                           18318
                                                                                                                                                                                                                                                                                                                                              18438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2188
                                                                                                                                                                                                                                                                                                                                                                                                  18498
                                                                                                                                                                                                                                                                                                                                                                                                                                                     18558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19098
                                                                                                                              8 8
                                                                            g
                                                                                                                                                                                 음 상 음
                                                                                                                                                                                                                                                          8686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8
```

8 6 8 6

6 8 8

8 6 8

ઠે

8 6 8 6

8 8 8

```
19037
                                                                                                                                                                                                                                                                                                         2127
                                                                                                                                                                                                                                                                                                                                         1947
                                                                                                                                                                                                                                                                                                                                                                         2007
                                                                                                                                                                                           18557
                                                                                                                                                                                                                                                                                           18737
                                                                                                                                                                                                                           18617
                                                                                                                                                                                                                                                                           1827
                                                                                                                              18437
                                                                                                                                                                             1647
                                                                                               18377
                                                                                                                                              1587
AGGAATTTATGCTTTGTCATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAAGAA 18197
                                                                               1467
                                                                                                                                                                                                                                                                                                                                                                                                                                       ttigtccattgtgacagtttgttaataaaccacatacacacttattaagattaaaa
                                                                                                                                                                                                                                                                                                                                                                                                         2008 TCTAACTGGAAAGTCAGCTTGGAAATGGACATTTCCAAGTATGTTTGGTGAGTCACAGA
                                                                                                                                                                                                                                                                          TIGCCTTTTGFACATGGAGGTCACCTCTGAAGTGATTTTTTTTGAGTAAAAGGAAATCTT
                                                                                         TTAAGCAAGTATGGTCTTGATAATGCATTAGAAAATTAAATTTTTTGAA
                                              agagattacttaagactgtgtgtgagtgaactaaacattgtaatattttgdaaacattaaa
                                                                                                              TTATTTTGTACAGTTAAGTGTAAATATTGTATGTTTTGTATCAATAGCATAATTAACTTG
                         | TGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAGCATCCTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19218 AAACTTTTTGACTTCAG 19234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2308 AAACTTTTGACTTCAG 2324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2188
                                                                                                                                                                                    1588
                                                                                                                                                                                                                     1648
                                                                                                                                                                                                                                                   1708
                                                                                                                                                                                                                                   18558
                                                                                                                                                                                                                                                                  18618
                                                                                                                                                                                                    18498
                                      18198
                                                                                      1408
                                                                                                       18318
                        1288
        18138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          영 장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                           9 6 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                             6 B 6
                                                                                                                                                                                                                                                                                                                8 8 8
                                                                                                                                                                                                                                                                                                                                                                            8 &
                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                   음
상
음
                                                                  원 상 원
                    8 8 8
                                                                                                                                                                                                                                                                                                                                                                      Sequence 3, Application US/10801671
; Sequence 3, Application US/10801671
; Publication No. US2004015212341
; GENERAL INFORMATION:
APPLICANT: YAN, Chunhua et al.
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: 05010-03-17
CURRENT FILING DATE: 2000-06-24
PRIOR FILING DATE: 2000-06-24
PRIOR PELICATION NUMBER: 09/810,671
PRIOR PELICATION NUMBER: 09/810,671
PRIOR PELICATION NUMBER: 09/810,671
PRIOR PELICATION NUMBER: 09/810,671
SOFTWARE: PRECEOF OF WINGOWE VERSION 4.0
SOFTWARE: PRECEOF OF WINGOWE VERSION 4.0
SEQ ID NO 3
SEQ ID NO 3
LENGTH: 21234
TWOOL NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                    19038 TAACATTGGCCAGCATCTGTTTATCAATGACATAAATACGTAAACCTATAAGAATTAAG 19097
                                                                                                                                                                                                                                                               2187
                                                                                                                                                                                                                                                     TTTATTAATTAGGCAATTTATGTCTGTGATAATTCTTACGGGAGAAAGAGGATTTGATTG 2247
                                                                 2127
                                                                                         TATTCTTTTCATTGGGTGATGTCAGGGTGATAACCAGACATTCATGGAAAGGCATGCAG 1947
          GACTACTTTATATTCTTAAAGGAATATTCTTTATATACTTCAAATTTAGAACTTAAACTTT 18677
                                                         1887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tctaactiggaaagtcagcttggaaaatggacatttccaagtatgtttggtgagtcacaga
                                                                                                                                                                                       2068 TATAAAATAGAAATTCTGATGAGAGGTTTCAGTTTTTAATACCAAGTCCTTAGGAGTCT
                                                                                                                                                                                                TAACATTGGCCAGCATCTGTTTATCAAATGACATAAATAGGTAAAACCTATAAGAATTAAG
                                                         Length 21234;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match

46.6%; Score 1097; DB 19;
Best Local Similarity 100.0%; Pred. No. 7.3e-216;
Matches 1097; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: DNA
; ORGANISM: Hc
US-10-801-671-3
                                                                                                                                                                                                                                                            2188
                                                                                                                                                                                                               18978
                                                                                                                                               18858
                                                                                                                                                                2008
                                                                                                 1888
                                                                                                                                 1948
                                                                1828
                                  1768
```

9 ð 임

g ò

õ

8 6

ò

ð ď ò

```
1058
                                                     1118
                                                                                                     1178
                                                                                                                                                      1238
  8 8 8
                                                                      g
                                                                                                     8
                                                                                                                       8
                                                                                                                                             ò
                                                                                                                                                                        g
                                                                                                                                                                                                   8
                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                     8
RESULT 15

US-10-425-114-26212

Sequence 26512, Application US/10425114

Publication No. US20040034888A1

GENERAL INFORMATION:

APPLICANT: Liu, Jingdong

APPLICANT: Abus, Yihua

APPLICANT: Zhou, Yihua

APPLICANT: Abaska, Jack E

APPLICANT: Cao, Yongwei

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

FILE REFERENCE: 38-21 (53313)B

CURRENT FILING DATE: 2003-04-28

NUMBER OF SEQ ID NOS: 73128

SEQ ID NO 26212

LENGTH: 3040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2661
                                                                                                                                                                                                                                                                                                                                                                                             2121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTTTCACAGTCTTTCA 1057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2182 TGAAGCAGCTCGTTCAGAATCCAAGTATTAGAGCACTTAAATAGTACTGATCCCAATAG 2241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGAACATCACAGTACTTTGGT 937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GITTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACGACTTTCTGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGTGCATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                    TCATGGCATGGATGCCATGCATGTAGCAGTGAAAATCGTAAAAATGTAGGCCGTTACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                     TGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTACTGATCCCAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAATATTTTTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTATGTAGTCAPATATAATTCTAPAATGAAACGTGATGAACGCACACCTGAAAAACACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACAGCTTTCTGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAATAAATTTTTTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTATGTAGTCAAATATAAATGAAACGTGATGAACGCACACTGAAAAACACAGA
                                                                                                                                                                                                                                                                                                                                                                   398 ATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGTGCATTGA
                                                                                                                                                                                                                                                                                                                    Length 3040;
                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                                    DB 18;
                                                                                                                                                                                                                                                                                                                 Query Match 41.5%; Score 977.4; DB 18
Best Local Similarity 99.9%; Pred. No. 1.6e-191;
Matches 978; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: Clone ID: LIB4115-001-H8_FLI
US-10-425-114-26212
                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                           2062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2242
                                                                                                                                                                                                                                                                                                                                                                                                                    458
                                                                                                                                                                                                                                                                                                                                                                                                                                           2122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         988
                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             કે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
```

## THIS PAGE BLANK (USPTO)

Н

```
ć
å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  >
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1, Appli
Sequence 1, Appli
Sequence 9, Appli
Sequence 699, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 22, Appli
Sequence 22, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 268, Appli
Sequence 313, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 9, Appl
Sequence 1, Appl
Sequence 3, Appl
Sequence 3, Appl
Sequence 28, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 2649, Ap
Sequence 2649, Ap
Sequence 313, App
Sequence 313, App
Sequence 313, App
Sequence 312, Appl
Sequence 312, Appl
Sequence 112, Appl
Sequence 112, Appl
Sequence 112, Appl
Sequence 1, Appli
                                                                                                                  3, 2005, 12:45:04; Search time 391.802 Seconds (without alignments) 9830.985 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                         Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
                   GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-810-671-1

US-10-109-854-1

US-09-013-656-1

US-09-023-655-699

US-09-905-999-26

US-09-905-999-22

US-09-905-999-23

US-09-905-999-22

US-09-905-999-22

US-09-905-999-22

US-09-905-999-22

US-09-905-999-24

US-09-905-999-24

US-09-905-999-24

US-09-905-999-24

US-09-905-999-24

US-09-906-444-310

US-09-906-444-310

US-09-016-444-712

US-09-016-444-712
                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                       1202784 segs, 818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                             Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                    - nucleic search, using sw model
                                                                                                                                                                                                                                                       IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB
                                                                                                                                                                                  US-10-801-671-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2354
2354
2354
2354
22534
21234
21234
21234
21234
1763
1763
1763
1763
1763
1763
1763
2061
2061
2061
2327
2327
                                                                                                                      August
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2354
2354
2354
2052.6
1178.2
1097.4
1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              640.6
44324.8
44324.8
430.8
430.8
430.8
263.2
203.4
123.8
95.2
95.2
95.2
95.2
                                                                                                                                                                                                         Perfect score:
                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
                                                                                    OM nucleic
                                                                                                                                                                                                                           Seguence:
                                                                                                                                                                                                                                                                                                          Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Database
                                                                                                                      ё
::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Regult
No.
                                                                                                                      Run
```

Db 301 CACGTTCGAAGAGCCACCGAAGGAAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTC 360
--

1501 ITTICINCARIAGENIANTIAACTICITAACACAACTICITAAACCTICATAACACCTICATAACCTICATAACCTICATAACCTICATAACCTICATAACACACCTICATAAACCACCTICATAAACCACCTICATAAACCACCTICATAACACACAC	RESULT 2 US-109-854-1 ; Sequence 1, Application US/10109854 ; Sequence 1, Application US/10109854 ; Patent No. 6630337 ; GENERAL INFORMATION: ; APPLICANT: YAN, CHUMHUA et al. ; TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, AND USES ; TITLE OF INVENTION: THEREOF ; TITLE OF INVENTION: THEREOF ; FILE REPERENCE: CLOOO7569DV ; FILE REPERENCE: CLOOO7569DV ; CURRENT APPLICATION NUMBER: US/10/109,854
151 ACCRGANCGROADGROADGROADGROADANGGROADANGGROADGROAGGAGAAAAAAAAAAAAAAAAAAAAAAAAAA	

	961 CCGAGGTCATTTTGGCTTTAGGTTGGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCA 1020	TTCTTATTGAATATTACCTTGGTTTCACAGTCTTTCAGACTCATGATAGTAAGAGCACC 108	TGGCAATGATGGAACGAATATTAGGACCCATACCACAACAACAAGAA 114 	AACGCAGTATTTTCACCATAACCAGCTAGATTGGGATGAACACAGTTCTGCTGGTAGAT 	ATGTTAGGAGACGCTGCAAACGTTGAAGGATTTATGCTTTGTCATGAGAACATG 	AGAAACTGTTTGACTGGTTCGAGGATTGGTTGGATATGATTTGATTTGTTTG	TGGATGAAGCATTGCAGCATCCTTTCTTTGACTTATAAAAAGAAATGAAATGGGAATC 138 	-	CATTCTAATATTTTTGTAACATTAAATTATTTGTACAGTTAAGTGTAAATATTGTATG 150 	TTTTGTATCAATAGCATAATTAACTTGTTAAGCAAGTATGGTCTTGATAATGCATTAGAA 156 	1 AAATTAAAATTAATTITICTITITGAAATTACCATTITAAATACCTTIGAAATAICCTT 162 	1 TGTGTCCAGTGATTGATTGATCTTGCCTTTTGTACATGGAGGTCACCTGTGAAGT 168	1 GATTTTTTTGAGTAAAGGAAATCTTGACTTTATATCTTAAAGGAATATCTTTA 1/4 1 GATTTTTTTGAGTAAAGGAAATCTTGACTTTATATTTTTTTAAAGGAATATTCTTTA 1/4 1 GATTTTTTTTTGAGTAAAGGAAATCTTGACTTTTATATTCTTAAAGGAATATTCTTTA 1/4	TATACTICAAATTTAGAACTTAAAAGTTTTTCTICTGTAATTGTTGAACGGGG 180 	1801 ATTATTAATTAACTGTAGGAGGTACTAGAAACCAAAACTCAGAAATGTTTAGTGT 1860 	1861 TAGAATTCTATTAAATTTTAAGTGTTGTATTCTTTTCATTGGGTGATGTCAGGGTGATA 1920 	1921 ACCAGACATTCATGGAAAGGCATGCAGTTTGTCCATTGTGACAGTTTGTTT
8 6 8	ò a	<i>ት</i> 8 6	ờ a	ò a	& & .	ờ a	රු සි	ò 8	ò a	ò 8	& g	<b>ራ 8</b> ሪ	· 음 장	<b>∂</b> 8	<i>እ</i> ብ	ර සි	& 
CURRENT FILING DATE: 2002-04-01  PRIOR APPLICATION NUMBER: 60/227,470  PRIOR FILING DATE: 2000-08-24  PRIOR APPLICATION NUMBER: 09/810,671  PRIOR FILING DATE: 2001-03-19  NUMBER OF SEQ ID NOS: 5  SEQ ID NO 1	; LENGTH: 2354 ; TYPE: DNA 7. TYPE: DNA US-1.0-109-854-1	Query Match 100.0%; Score 2354; DB 4; Length 2354; Best Local Similarity 100.0%; Pred. No. 0; Matches 2354; Conservative 0; Migmatches 0; Indels 0; Gaps 0;	Qy     1 GCCAGCTGGGGTTACTTTAAAAACATGCTCCATGTGCATCCTCTTGAAGCTTCGCACT     60       Db     1 GCCAGCTGGGGTTACTTTAAAAAACATGCTCCATGTGCATCCTCTTGAAGCTTCGCACT     60	Qy       61 CTGTTGAAGAGGACACTCATCCCAGTCATTATTTAGAAGCAAGGTCCTTGAATGAGGAG       120         Db       61 CTGTTGAAGAGGACACTCATCCCAGTCATTATTTAGAAGCAAGGTCCTTGAATGAGCAG       120	Oy 121 ATTATCGGGACCGGAGATACGTTGACGAATACAGGAATGACTGCTGAAGGATATGTTC 180	Qy     181 CTAGACATTATCACAGAGACATTGAAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAG     240       Db     181 CTAGACATTATCACAGAGACATTGAAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAG     240	Oy         241         TCCGCAGCAGAAGCAGTCCTAAAAGGAACGCAATAGACACTGTTCAAGTCATCAGT         300           Db         241         TCCGCAGCAGCAGAAGCAGTCCTAAAAGGAAGCGCAATAGACACTGTTCAAGTCATCAGT         300	<b>м</b> м	Oy 361 ACCTGATCTGTCAAAGTGGAGGACGTTCTAAGAGCAAGATATGAAATCGTGGACACTTTGG 420	Qy       421 GTGAAGGAGCCTTTGGCAAAGTTGTAGAGCATTGATCATGGCATGGCATGCAT	Qy 481 TAGCAGTGAAAATGTAAAAATGTAGGCGGTTACCGTGAAGCAGCTCGTTCAGAAATCC 540	OY 541 AAGTATTAGAGCACTTAAATAGTACTGATCCCAATAGTGTCTTCCGATGTGTCCAGATGC 600	dy     601     TAGAATGGTTHGATCATCATGGTCATGTTTGTATTGTGTTTGAACTACTGGGACTTAGTA     600       LINE	dy       661 CTTACGATTTCATTAAAGAAACAGCTTTCTGCCATTTCAAATTGACCACATCAGGCAGA 720         Db       661 CTTACGATTTCATTAAAGAAAACAGCTTTCTGCCATTTCAAATTGACCACATCAGGCAGA 720	Qy         721         TGGCGTATCAGATCTGCCAGTCAATAAATTTTTTACATCATAAATTAAATTAAATTAAACCCATACAG         780           Db         721         TGGCGTATCAGATCTGCCAGTCAATAAATTTTTAAATTAAATTAAATTAAACCCATAAAGCCATAAAAGCCATAAAAGCCATAAAAAAATTTTTAAATTAAATTAAATTAAATTAAAATTAAAA	781 ATCTGAAGCCTGAAATATTTTGTTGAAGTCTGACTATGTAGTCAAATATATTCTA 8	DD 781 ATCTGAAGCCTGAAAATATTTTGTTTGTGAAGTCTGACTATGTAGTCAAATATAATTCTA 840

```
AUGITAGGAGAGGGGGAAACGGTGAAGGAATTATGCTTTGTCATGATGAAGAACATG 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TICTTATTGAATATTACCTTGGTTTCACAGTCTTTCAGACTCATGATAGTAAAGAGCACC 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021 TTCTTATTGAATATTACCTTGGTTTCACAGTCTTTCAGACTCATGATAGTAAAGACCC 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACGCAAGTATTTCACCATAACCAGCTAGATTGGGATGAACACAGTTCTGCTGGTAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGCAACGTATGATGATGAACATCACAGTACTTTGGTGTGTACCGGGCACTACAGAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                            AAATGAAACGTGATGAACGCACACTGAAAAACACAGATATCAAAAGTTGTTGACTTTGGAA
                                                                                                                                             TAGAATGGTTTGATCATGGTCATGTTTTGTATTGTGTTTTGAACTACTGGGGACTTAGTA
                                                                                                                                                                                                                                                                  CTTACGATTTCATTAAAGAAAACAGCTTTCTGCCATTTCAAATTGACCACATCAGGCAGA
                                                                                                                                                                  TAGCAGTGAAAATCGTAAAAATGTAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCC
                                                                                                                                                                          TCCGCAGCAGGAGAAGCAGTCCTAAAAGGAAGCGCAATAGACACTGTTCAAGTCATCAGT
                                          <u>ACCTGATCTGTCAAAGTGGAGACGTTCTAAGAGCAAGATATGAAATCGTGGACACTTTGG</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1201
                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                        301
                                                                                                                                                                                                                                                                                         661
                                                                                                                        361
                                                                                                                                                       421
                                                                                                                                                                        481
                                                                                                                                                                                        481
                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                         661
                                                        241
                                                                        301
                                                                                                         361
                                                                                                                                       421
                                        241
       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                      Db
                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                   B &
                                                                                                                                                                                                                                                                                                        8 8 8
                                                                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                   අ රු
                                                                                                       8
                                       8 6 B 6
                   임
                                                                                                                                                                                                                                                                              US-10-339-035-1
| Sequence 1, Application US/10339656
| Sequence 1, Application US/10339656
| Patent No. 6733978
| GENERAL INFORMATION:
| APPLICANTY YAN, Chuhhua et al. APPLICANTY YAN, Chuhua et al. TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, PLICE REFERENCE: CLO00758DIV2 CURRENT PILING DATE: 2003-01-10
| PRIOR PELICATION NUMBER: 10/109,854 |
| PRIOR FILING DATE: 2002-04-01 |
| PRIOR FILING DATE: 2002-04-01 |
| PRIOR FILING DATE: 2000-08-24 |
| PRIOR FILING DATE: 2000-08-24 |
| NUMBER OF SEQ ID NOS: 5 |
| SOFTWARE: FastSEQ for Windows Version 4.0 |
| SEQ ID NO 1 |
| LINGTH: 2354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                           2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                          2160
                                                                                                                          2220
                                                                                                                                          2220
                                                                                                                                                          2280
                                                                                                                                                                                           2340
                                                          2100
                                                                                         TTTTTAATACCAAGTCCTTAGGAGTCTTAACATTGGCCAGCATCTGTTTATCAAATGACA 2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGTTGAAGAGACACTCATCCCAGTCATTATTTAGAAGCAAGGTCCTTGAATGAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GCCAGCTGGGGTTACTTTAAAAACATGCTCCATGTGCATCCCTCTTGAAGCTTCGCACT
                                                                                                                                                                                         TAAATACGTAAACCTATAAGAATTAAGTTTATTAATTAGGCAATTTATGTCTGTGATAAT
                                                                                                                                                          TCTTACGGGAGAAAGAGGATTTGATTGGAAAGCAGTTTGGGAAGAAAGTGCTGCTGAAAT
Gaps
                         ACATACACACTTTATTTAAGATTAAAATCTAACTGGAAAGTCAGCTTGGAAATGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 2354;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
100.0%; Score 2354;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2354; Conservative 0; Mismatches
                                                                                                                                                                                                                              AACAAAAAAAAAAC 2354
                                                                                                                                                                                                                                             AACAAAAAAAAAC 2354
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-339-656-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                               2341
                                                                                                                                              2161
                                                                                                                                                                                                              2281
                                                                                                                                                                                                                                               2341
                                                                                                                               2161
                                                                                                                                                               2221
                                                                                                                                                                               2221
                                                                                                                                                                                               2281
                                              1981
                                                                                              2101
                              1981
              1921
```

8 8 8

8 6 8

8 8

ద

셤

1200

셤 ઠે 엄 ò 엄

ठ

1020

1020 960

840 900 900 960

840

600 900 999 099 720 720 780 780

480 480

420

300

300

360 360 420

8 6 8

ઠે

g

**6 6 6** 

6 6 6

8

6 8 6

g

8 6 8 6

셤

6 8 6

8 8 8 8

8

g

8 6 8 6

윱

ò

```
204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   408 AAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGAGAAGCAGCAGTCCTA 467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 265 AAAGGAAGCGCAATAGACACTGTTCAAGTCATCAGTCACGTTCGAAGAGCCACCGAAGGA 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       205 AAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAGAAGCAGTCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         85 GTCATTATTTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           145 ACGAATACAGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 2; Length 2446;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4;
                                                                                                                                                             APPLICANT: Hallman, Jennifer L.
APPLICANT: Lal, Preeti
APPLICANT: Bandman, Olga
APPLICANT: Shah, Purvi
APPLICANT: Shah, Purvi
APPLICANT: Corlay, Neil C.
APPLICANT: Corlay, Neil C.
APPLICANT: Corlay, Neil C.
APPLICANT: Corlay, Neil C.
APPLICANT: Guegler, Karl G.
TITLE OF INVENTION: PROTEIN KINASE MOLECULES
CORRESPONDENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: FRANCES for Windows Version 2.0 CURRENT APPLICATION DATA:
APPLICATION WIMBER: US/09/016,000
CLASSIFICATION BERWITH
CLASSIFICATION BATA:
PRIOR APPLICATION DATA:
FILING DATE:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           87.2%; Score 2052.6;
95.8%; Pred. No. 0;
iive 0; Mismatches
                                                                                                                                                                                                                                                                                                                   STREET: 107te Pharmaceuticals, Inc. STREET: 3174 Porter Drive CITY: Palo Alto STATE: CA COUNTRY: USD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0465 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
                                                                                                              ; Sequence 9, Application US/09016000
; Patent No. 5962232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 2446 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: NEUTFWT01
CLONE: 339967
 2341 AACAAAAAAAAAC 2354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 95.8
Matches 2155; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 650-845-4166
TELEX:
                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 94304
                                                                               RESULT 4
US-09-016-000-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-016-000-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                       음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
AGAAACTGTTTGACCTGGTTCGAAGAATGTTAGAATATGATCCAACTCAAAGAATTACCT 1320
                     TGGATGAAGCATTGCAGCATCCTTTGTTTGACTTATTAAAAAAGAAATGAAATCGGAATC 1380
                                                                                                           regargaagcarrecagcarccrrrcrrrcacrrarraaaaaagaargaaarcgaarc 1380
                                                                                                                                                CATTCTAATATTTTTGTAAACATTAAATTATTTTGTACAGTTAAGTGTAAATATTGTATG 1500
                                                                                                                                                                                                                                               CATTCTAATATTTTTGTAAACATTAAATTATTTTGTACAGTTAAGTGTAAATATTGTAIG 1500
                                                                                                                                                                                                                                                                                                   TITIGIATCAATAGCATAATTAACTIGITAAGCAAGTAIGGICTIGATAATGCATTAGAA 1560
                                                                                                                                                                                                                                                                                                                       AAATTAAAATTTAATTTTTTTTTTTGAAATTACCATTTTTAAATACCTTTGAAATATCCTT 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGTCCAGTGATAAATGTGATTGATCTTGCCTTTTGTACATGGAGGTCACCTCTGAAGT 1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1741 TATACTTCAAATTTAGAACTTTAAAAGTTTTTCTTCTGTAATTGTTGAACGGGTG 1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAGAATTCTATTAAATTTTAAGTGTTGTATTCTTTTTTCATTGGGTGATGTCAGGGTGATA 1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATACTICAAATTIAGAACTIAAACTITAAAAGTITITCTICTGTAATTGTTGAACGGGTG 1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTATTATTAACTCTAGATAAGCAGGTACTAGAAACCAAAACTCAGAAAATGTTTACTGT 1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAGAATTCTATTAAATTTTAAGTGTTGTATTCTTTTTCATTGGGTGATGTCAGGGTGATA 1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACATACACACTTTATTTAAGATTAAAATCTAACTGGAAAGTCAGCTTGGAAAATGGACAT 2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTCCAAGTATGTTTGGTGAGTCACAGATATAAAATAGAAATTCTGATGAGAGGTTTCAG 2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITITAATACCAAGICCITAGGAGICTIAACATIGGCCAGCATCIGITTAICAAAIGACA 2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAAATACGTAAACCTATAAGAATTAAGTTTATTAATTAGGCAATTTATGTCTGTGATAAT 2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAATTAAAATTTTTCTTTTTGAAATTACCATTTTTAAATACCTTTGAAATATCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGTGTCCAGTGATAAATGTGATTGATCTTGCCTTTTGTACATGGAGGTCACCTCTGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTTTAATACCAAGTCCTTAGGAGTCTTAACATTGGCCAGCATCTGTTTATCAAATGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAAATACGTAAACCTATAAGAATTAAGTTTAATTAAGTAATTTAGCCAATTTATGTCTCTGTGATAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTTACGGGAGAAAGAGGATTTGATTGGAAAGCAGTTTGGGAAGAAGTGCTGCTGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2341 AACAAAAAAAAAC 2354
                                                                                                           1321
                                                                                                                                                                                                                                                              1441
                                                                                                                                                                                                                                                                                                                                        1501
                                                                                                                                                                                                                                                                                                                                                                                                                1561
 1261
                                                                         1321
                                                                                                                                                 1381
                                                                                                                                                                                                                         1441
                                                                                                                                                                                                                                                                                                   1501
                                                                                                                                                                                                                                                                                                                                                                           1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2281
```

801

1661

921

861

1721

981

us-10-801-671-1.rni

```
Sequence 26, Application US/09905999
| Patent No. 6797513 |
| GENERAL INFORMATION: |
| APPLICANT: ULLKICH, Axel |
| APPLICANT: ULLKICH, Axel |
| TITLE OF INVENTION: CLK PROTEIN KINASES AND RELATED PRODUCTS AND METHODS |
| FILE REPRENCE: 038602/0431 |
| CURRENT APPLICATION NUMBER: US/09/905,999 |
| CURRENT FILING DATE: 1097-07-17 |
| PRIOR APPLICATION NUMBER: PCT/1B97/00946 |
| PRIOR FILING DATE: 1997-06-17 |
| PRIOR PILING DATE: 1997-06-17 |
| PRIOR PLILING DATE: 1997-06-17 |
| PRIOR PPLICATION NUMBER: US 60/034,286 |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1162 GGGTGATGTCAGGGTGATAACCAGACATTCATGGAAAGGCATGCAGTTTGTCCATTGTGA 1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1902 GGGTGATGTCAGGGTGATAACCAGACATTCATGGAAAGGCATGCAGTTTGTCCATTGTGA 1961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGCTTGGAAAATGGACATTTCCAAGTATGTTTGGTGAGTCACAGATATAAAATAGAAA 2081
                                                                                                                                                                          622 AGAAATGAAATGGGAATCAGTGGTCTTACTATATACTTCTCTAGAAGAGATTACTTAAGA 681
                                                                                                                                                                                                                                               CITAAAGGAATATTCTTTATATACTTCAAATTTAGAACTTAAACTTTAAAAGTTTTTCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTCAGAAAATGTTTACTGTTAGAATTCTATTAAATTTTTAAGTGTTGTATTCTTTTTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCAGAAAATGTTTACTGTTAGAATTCTATTAAATTTTTAAGTGTTGTATTCTTTTTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGTTTGTTTAATAAAACCCACATACACACTTTATTTAAGATTAAAATCTAACTGGAAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCTTGGAAAATGGACATTTCCAAGTATGTTTGGTGAGTCACAGATATAAAAATAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTCTGATGAGAGGTTTTCAGTTTTTAATACCAAGTCCTTAGGAGTCTTAACATTGGCCAGC
                                                        CTGTGTCAGTCAAACATTCTAATATTTTTGTAAAACATTAAATTATTTTGTACAGTT
                                                                                                         1483 AAGIGTAAATATIGTAIGITITIGTAICAATAGCAIAATIAACTIGTIAAGCAAGIAIGGI
                                                                                                                           TGGAGGTCACCTCTGAAGTGATTTTTTTTGAGTAAAAGGAAATCTTGACTTTATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTAATTGTTGAACGGGTGATTATTATTAACTCTAGATAAGCAGGTACTAGAAACCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGITIGITIAAIAAAACCACAIACACACITITAAITIAAGAITAAAATCIAAACIGGAAAGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTCTGATGAGAGGTTTCAGTTTTTAATACCAAGTCCTTAGGAGTCTTAACATTGGCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1402 ATCTGTTTATCAAATGACATAAATACGTAAACCTATAAGAATTAAGTTTATTAAT 1456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-905-999-26
                                                                                                                                                                            1543
                                                                                                                                                                                                                                               1602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2142
                                      1423
                                                                      682
                                                                                                                                                                                                            802
                                                                                                                                                                                                                                                                                 862
                                                                                                                                                                                                                                                                                                                    1662
                                                                                                                                                                                                                                                                                                                                                    922
                                                                                                                                                                                                                                                                                                                                                                                       1722
                                                                                                                                                                                                                                                                                                                                                                                                                         982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2082
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1782
                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음
                                  8
                                                           셤
                                                                                            ò
                                                                                                                                g
                                                                                                                                                                          ò
                                                                                                                                                                                                     g
                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGAAATGAAATGGGAATCAGTGGTCTTACTATATACTTCTCTAGAAGAGATACTTAAGA 1422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTCATGATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAAGAATGTTAGAATATGATC 1302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGATTCAGAAAACAAGAAAACGCAAGTATTTTCACCATAACCAGCTAGATTGGGATGAAC 1182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAGTTCTGCTGGTAGATATGTTAGGAGGCTGCAAACCGTTGAAGGAATTTATGCTTT 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   322 ATGATAGTAAAGAGCACCTGGCAATGGAGGAACGAATATAGGACCCATACCACAACAACAA 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      262 IGTAGCGCATAGGTTGCATTCTTATTGAATATTACCTTGGTTTCACAGTCTTTCAGACTC 321
APPLICANT: Susan G. Stuart
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF BLOOD CELL GENE
TITLE OF INVENTION: EXPRESSION
NUMBER OF SEQUENCES: 1508
CORRESPONDENCE ADDRESS:
ADDRESSE: INCTE PHARMACEUTICALS, INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCATGATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAAGAATGTTAGAATATGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 1456;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3; Indels
                                                                                                                                                                                     ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT WORD DATA:
APPLICATION NUMBER: US/09/023,655
FILING DATE: HEREWITH
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          50.1%; Score 1178.2; DB 4 99.7%; Pred. No. 4.7e-286; tive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                         PILING DATE:
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0001 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 845-6166
TELEFAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 699:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                    STREET: 3174 PORTER
CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; IMMEDIATE SOURCE:
; LIBRARY: HNT2AGT01
; CLONE: 488842
US-09-023-655-699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 1191; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ያ ያ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ठे
```

1164

1378

1224

1438

1284

1498

```
RESULT 7

US-09-810-671-3

US-09-810-671-3

Sequence 3, Application US/09810671

Patent No. 6455291

GENERAL INFORMATION:

GENERAL INFORMATION:

TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, AND USES

TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES

TITLE OF INVENTION: THEREOF

TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES

TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES

CURRENT APPLICATION NUMBER: US/09/810,671

CURRENT APPLICATION NUMBER: 2001-06-08

NUMBER OF SEQ ID NOS: 5

SOFTWARE: FRSESEQ for Windows Version 4.0
GGTCTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTT 1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGAGATTACTTAAGACTGTGTCAGTCAACTAAAACATTCTAATATTTTTGTAAACATTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTATTTTGTACAGTTAAAGTGTAAATATTGTATGTTTTGTATCAATAGCATAATTAACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAGCATCCTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1348 TIGACITALIBABABAGABAIGABAIGGBAICAGIGGICITACIAIATACITCICIAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1228 AGGAATTTATGCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAAGAA
                                                                                                    TGAAGGAATTTATGCTTTTGTCATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAA
                                                                                                                                                                                                  GAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAGCATCCTT
                                                                                                                                                                                                                                               1439 GAATGTIGGAGTAIGACCCAGCGAGAGGAICACCTIGGAIGAAGCAITGCAGCACCTI
                                                            GACCCATACCACAACACATGATTCAGAAAACAAGAAACGCAAGTATTTTCACCATAACC
                                                                                                                                       AGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGT
                                                                                                                                                    TCACAGTCTTTCAGACTCATGATAGTAAGAGCACCTGGCAATGATGGAACGAATATTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 21234;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         46.6%; Score 1097; DB 3; L
llarity 100.0%; Pred. No. 4.4e-265;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                 TCTTTGACTTATTAAAAAGAAATGAAATGG 1375
                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 1097; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 3
LENGTH: 21234
TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-810-671-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1288
                                                                                                                                                                                                                                                                                                           1499
                                                                                                                                             1165
                                                                                                                                                                                         1225
                                                                                                                                                                                                                                        1285
                                                                                                                                                                                                                                                                                     1345
                           1139
                                                  1045
                                                                        1199
                                                                                               1105
                                                                                                                     1259
                                                                                                                                                                                                                1379
      985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                           g
                                                                                                                                                                                                                                      S a
                                                                                                                                                                                                                                                                               중
음
                                                                                                                 g
                                                                                                                                                          8 S
                      g
                                          상 점
                                                                                         ò
                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGTACTITGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTGGCTTTAGGTT 984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAGGCCGTTACCGTGAAGCAGCTCGTTCAGAATCCAAGTATTAGAGCACTTAAATAGTA 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGTGAAGTCTGACTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGAACGCACAC 864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAAAAACACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGAACATC 924
                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGITTGIAITGAAGTACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACA 684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   624
                                                                                                                                                          144
                                                                                                                                                                               298
                                                                                                                                                                                                      204
                                                                                                                                                                                                                              358
                                                                                                                                                                                                                                                    264
                                                                                                                                                                                                                                                                   324
                                                                                                                                                                                                                                                                                                                       478
                                                                                                                                                                                                                                                                                                                                              AAAGATCCAGGAGTATAGAGGATGATGAGGAGGTCACCTGATCTGTCAAAGTGGAGACG 384
                                                                                                                                                                                                                                                                                                                                                                     538
                                                                                                                                                                                                                                                                                                                                                                                           TTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTG 444
                                                                                                                                                                                                                                                                                                                                                                                                                  598
                                                                                                                                                                                                                                                                                                                                                                                                                                          504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGATCCCAATAGTGTCTTCCGATGTGTCCAGATGCTAGAATGGTTTGATCATCATGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGACCCCAACAGTGTCTTCCGATGCGTCCAGATGCTAGAGTGGTTTGATCATCATGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAAATTTTTTACATCATAATAAATTAACCCATACAGATCTGAAGCCTGAAATATTTTGT
                                                                                                                                                                                                                                                                                                                                                           TAGACTGCATTGATCATGGCATGGATGGCATGCATGTAGCAGTGAAAAATG
                                                                                                                                                                     239 GTCACTATTTAGAAGCAAGATGCTTGAATGAGAGAGTTATCGGGACCGGAGATACATTG
                                                                                                                                                                                                      145 ACGAATACAGGAATGACTACTGTGAAGGATATGTTCCTAGACATTATCACAGAGACATTG
                                                                                                                                                                                                                   299 AIGAATACAGAAATGACTACTGCGAAGGATATGTTCCAAGACATTACCATAGAGACGTTG
                                                                                                                                                                                                                                                                                                 aaagaagcgcaatagacactgttcaagtcatcagtcacgttcgaagagccaccgaagga
                                                                                                                                                                                                                                                                                                              AAAGCGGGTATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGGAAGCAGTCCTA
                                                                                                                                                          GTCATTATTAGAAGCAAGGTCCTTGAATGAGCGAGATTATCGGGACCGGAGATACGTTG
                                                                                                                                    Gaps
                                                                                                                                   ;
0
                                                                                                            Length 1549;
                                                                                                             Score 1097.4; DB 4; Length
Pred. No. 9.9e-266;
0; Mismatches 121; Indels
       PRIOR FILING DATE: 1996-12-19
NUMBER OF SEQ ID NOS: 26
SOFTWARE: PatentIn version 3.0
SEQ ID NO 26
                                                                                                             Query Match
Best Local Similarity 90.6%;
Matches 1170; Conservative
                                                                  TYPE: DNA
CORGANISM: Mus musculus
US-09-905-999-26
                                                       LENGTH: 1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             805
                                                                                                                                                                                                                                                                                                     265
                                                                                                                                                                                                                                                                                                                           419
                                                                                                                                                                                                                                                                                                                                                                      479
                                                                                                                                                                                                                                                                                                                                                                                                                     539
                                                                                                                                                                                                                                                                                                                                                                                                                                            445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         839
                                                                                                                                                                                                                                                        205
                                                                                                                                                                                                                                                                                                                                                   325
                                                                                                                                                                                                                                                                                                                                                                                               385
                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
```

면 당 당

8 8 8

8 6

8 6

18197

1287

ö

18257

1347

18317 1467

1407

Thu

셤

8 6

```
18497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18737
                                                                                                                                                                                                                                                                                                                                                18377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1407
                                                                                                                                                                                                                                                                                                                       1467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2127
                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAACATTGGCCAGCATCTGTTTATCAAATGACATAAATACGTAAAACCTATAAGAATTAAG 2187
                                                                                                                                                                                                                                                                                                                                                                                                                              TTATTTTGTACAGTTAAGTGTAAATATTGTATGTTTTGTATCAATAGCATAATTAACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TATTCTTTTCATTGGGTGATGTCAGGGTGATAACCAGACATTCATGGAAAGGCATGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTGACTTATTAAAAAAGAAATGAAATGGGGAATCAGTGGTCTTACTATATACTTCTCTAGA
                                                                                                                                                                                                                                                                                                                                      TIGCCTTTTGTACATGGAGGTCACCTCTGAAGTGATTTTTTTGAGTAAAAGAAATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACTACTTTATATTCTTAAAAGGAATATTCTTTATATACTTCAAATTTAGAACTTAACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTAGAAACCAAAAACTCAGAAAATGTTTACTGTTAGAATTCTATTAAATTTTAAGTGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTAACTGGAAAGTCAGCTTGGAAAATGGACATTTCCAAGTATGTTTGGTGAGTCACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18138 AGGAATTTATGCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCTGGTTCGAAGAA
                                                                                                                                                                                                                             AGAGATTACTTAAGACTGTGTCAGTCAACTAAACATTCTAATATTTTTTGTAAACATTAAA
                                                                                                                                                                                                                                                                                                                                                                            TTATTTTGTACAGTTAAGTGTAAATATTGTATGTTTTGTATCAATAGCATAATTAACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTAGAAACCAAAAACTCAGAAAATGTTTACTGTTAGAATTCTATTAAATTTTTAAGTGTTG
                                                                                                                                                             1228 AGGAATTTATGCTTTGTCATGATGAAGAACATGAAACTGTTTGACCTGGTTCGAAGAA
                                                                                                                                                                                                                TGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAGCATCCTTTCT
                                                                                                                                                                                                                                                                    TTGACTTATTAAAAAAGAAATGAAATGGGAATCAGTGGTCTTACTATATACTTCTCTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACTACTTTATATTCTTAAAGGAATATTCTTTATATACTTCAAATTTAGAACTTAACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAGTTTTTCTTCTTGTAATTGTTGAACGGGTGATTATTATTAACTCTAGATAAGCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTGTCCATTGTGACAGTTTGTTTAATAAAACCACATACACACTTTATTAAGATTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTAACTGGAAAGTCAGCTTGGAAATGGACATTTCCAAGTATGTTTGGTGAGTCACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATAAAATAGAAATTCTGATGAGGGTTTCAGTTTTTAATACCAAGTCCTTAGGAGTCT
                                                                                                                                  Gaps
                                                                                                                                  ö
                                                                                                      Length 21234;
                                                                                                                                  Indels
                                                                                                      Query Match 46.6%; Score 1097; DB 4; L
Best Local Similarity 100.0%; Pred. No. 4.4e-265;
Matches 1097; Conservative 0; Mismatches 0;
               Version
NUMBER OF SEQ ID NOS: 5
SOFWHARE: FastSEQ for Windows
SEQ ID NO 3
LENGTH: 21234
                                                    TYPE: DNA
ORGANISM: Homo
                                                                               US-10-109-854-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18798
                                                                                                                                                                                                                  1288
                                                                                                                                                                                                                                           18198
                                                                                                                                                                                                                                                                     1348
                                                                                                                                                                                                                                                                                                                          1408
                                                                                                                                                                                                                                                                                                                                                  18318
                                                                                                                                                                                                                                                                                                                                                                             1468
                                                                                                                                                                                                                                                                                                                                                                                                                                 1528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2128
                                                                                                                                                                                                                                                                                                                                                                                                      18378
                                                                                                                                                                                                                                                                                                                                                                                                                                                           8438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2068
                                                                                                                                                             ઠ
                                                                                                                                                                                요
                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                    ď
                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      상 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                          18977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18677
                                                                                                                                                                                                                                           18737
                                                                                                         1707
                                                                                                                                                                                                                                                                    1887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2187
                                                                                                                                                             1767
                                                                                                                                                                                                                                                                                                                          TATTCTTTTTCATTGGGTGATGTCAGGGTGATAACCAGACATTCATGGAAAGGCATGCAG 1947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AND USES
                                                   AAAAGTTTTTCTTCTTCTGTAATTGTTGAACGGGTGATTATTATTATTAACTCTAGATAAGCGT
                                                                                                                                                                                                                                                                                   ACTAGAAACCCAAAACTCAGAAAATGTTTACTGTTAGAATTCTATTAAATTTTAAGTGTTTG
                                                                                                                                                                                                                                                                                                                                                                            Sequence 3, Application US/10109854
; Fatent No. 6630337
; GENERAL INFORMATION:
; APPLICANT: YAM, Chunhua et al.
; TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
; TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND
; TITLE OF INVENTION: THEREOF,
; TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND
; TITLE OF INVENTION: 1000758DIV
; CURRENT APPLICATION NUMBER: US/10/109,854
; CURRENT FILING DATE: 2002-04-01
; PRIOR APPLICATION NUMBER: 60/227,470
; PRIOR APPLICATION NUMBER: 09/810,671
; PRIOR FILING DATE: 2001-03-19
               GACTACTITATATATICTITAAAGGAATATICTITATATATACTITCAAAITITAGAACTITAAGGTAACTIT
                                                                                                                                                                                                                                                                                                                                        TATTCTTTTTCATTGGGTGATGTCAGGGTGATAACCAGACATTCATGGAAAGGCATGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTAACTGGAAAGTCAGCTTGGAAAATGGACATTTCCAAGTATGTTTGGTGAGTCACAGA
                                                                                                                                                                                                                                                                     ACTAGAAACCAAAACTCAGAAAATGTTTACTGTTAGAATTCTATTAAATTTTTAAGTGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACTACTTTATATTCTTAAAGGAATATTCTTTATATACTTCAAATTTAGAACTTAACTTT
                                                                                                                                                                                                                AAAAGTTTTTCTTCTGTAATTGTTGAACGGGTGATTATTATTAACTCTAGATAAGCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTAACTGGAAAGTCAGCTTGGAAAATGGACATTTCCAAGTATGTTTGGTGAGTCACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAACATTGGCCAGCATCTGTTTATCAAATGACATAAATACGTAAAACCTATAAGAATTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAACTTTTGACTTCAG 2324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 8
US-10-109-854-3
                                                                                                                                  18558
                                                                                                                                                             1708
                                                                                                                                                                                                                  1768
                                                                                                                                                                                                                                           18678
                                                                                                                                                                                                                                                                    1828
                                                                                                                                                                                                                                                                                               18738
                                                                                                                                                                                                                                                                                                                          1888
                                                                                                                                                                                                                                                                                                                                                                                                      18858
                                                                                                                                                                                                                                                                                                                                                                                                                                                           18918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2308
  1528
                                                      1588
                                                                                                         1648
                                                                                                                                                                                                                                                                                                                                                                                                                                 2008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2188
                           8438
                                                                                                                                                                                       18618
                                                                                                                                                                                                                                                                                                                                                   18798
                                                                                                                                                                                                                                                                                                                                                                             1948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        86061
```

g

ઠે

8 6

셤

ઠે

8 S

g õ g g ઠે 요 8 6

ò

8 6 8 6

중 원

õ

용 ઠે 음 상 셤 ò

```
18617
                                                                                                              8618 GACTACTTTATATTCTTAAAGGAATATTCTTTATATATACTTCAAATTTAGAACTTTAACTTT 18677
                                                                                                                                                                                                 18737
                                                                                                                                                                                                                                                     19097
                                                                                                                                                                1827
                                                                                                                                                                                                                                                                                                   1947
                                                                                                                                                                                                                                                                                                                                 18798 TATTCTTTTCATTGGGTGATGTCAGGGTGATAACCAGACATTCATGGAAAGGCATGCAG 18857
                                                                                                                                                                                                                                                                                                                                                                                                                                                         19037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 238, Application US/09919039
Patent No. 6727066
GENERAL INFORMATION
TITLE OF INVENTION: GENES EXPRESSED IN TREATED HUMAN C3A LIVER CELL CULTURES
TITLE REPERENCE: PA-0035 US
CURRENT APPLICATION NUMBER: US/09/919,039
CURRENT FILING DATE: 2002-09-09
PRIOR FILING DATE: 2000-07-28
NUMBER OF SEQ ID NOS: 401
SOFTWARE: PERL Program
SEQ ID NO 238
LENGTH: 2254
                                                                                                                                                                                                                                                                                                                                                                       2007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19098 TTTATTAATTAGGCAATTTATGTCTGTGATAATTCTTACGGGAGAAAGAGAGATTTGATTG 19157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAACATTGGCCAGCATCTGTTTATCAAATGACATAAATACGTAAAACCTATAAGAATTAAG 2187
                                                                                                                                                                                                                                                                                                 TATTCTTTTTCATTGGGTGATGTCAGGGTGATAACCAGACATTCATGGAAAGGCATGCAG
                                          1828 ACTAGAAACCAAAACTCAGAAAATGTTTACTGTTAGAATTCTATTAAATTTTAAGTGTTG
                                                                                                                                                                                 18978 TATAAAAATAGAAATTCTGATGAGAGGTTTCAGTTTTTAATACCAAGTCCTTAGGAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITAITAATTAGGCAATTTATGTCTGTGATAATTCTTACGGGAGAAAGAGGATTTGATTG
                                                                                           1708 GACTACTTTATATTCTTAAAGGAATATTCTTTATATACTTCAAATTTAGAACTTAACTTT
                                                                                                                                                             TITGICCATIGIGACAGITIGITIAAIAAAACCACATACACACITIAITIAAGAITAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTAACTGGAAAGTCAGCTTGGAAAATGGACATTTCCAAGTATGTTTGGTGAGTCACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TATAAAAATAGAAATTCTGATGAGGTTTCAGTTTTTAATACCAAGTCCTTAGGAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
NGGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No. 6727066 420527.25
FEATURE:
NAME/KEY: unsure
                         1648 TTGCCTTTTGTACATGGAGGTCACCTCTGAAGTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19218 AAACTTTTTGACTTCAG 19234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2308 AAACTTTTTGACTTCAG 2324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
US-09-919-039-238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2128
                                                                                                                                                                                                                                                                                                   1888
                                                                                                                                                                                                                                                                                                                                                                   1948
                                                                                                                                                                                                                                                                                                                                                                                                                                      2008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2188
                                                   요
                                                                                         ò
                                                                                                                      음
                                                                                                                                                  ò
                                                                                                                                                                                        g
                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                         8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                         음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                          Sequence 3. Application US/10339656
| Patent No. 6733978
| GENERAL INFORMATION:
| APPLICANT YAN, Chunhua et al. |
| TILLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES |
| TILLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, TILLE OF INVENTION: HERRENCE: CLOO758D1V2 |
| TILLE OF INVENTION: TANDER: US/10/339,656 |
| TILLE OF INVENTION: HUMBER: 10/109,854 |
| FILLE REFRENCE: CLOO075BD1V2 |
| CURRENT APPLICATION NUMBER: 10/109,854 |
| PRIOR FILING DATE: 2002-04-01 |
| PRIOR FILING DATE: 2002-04-01 |
| PRIOR FILING DATE: 2000-08-24 |
| SOFTWARE: FastSEQ for Windows Version 4.0 |
| SOFTWARE: FastSEQ for Windows Version 4.0 |
| SEQ ID NOS: 5 |
| LENGTH: 2001-03-19 |
                                                                       2307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTATTTTGTACAGTTAAGTGTAAATATTGTATGTTTTGTATCAATAGCATAACTTG 1527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTATTAATTAGGCAATTTATGTCTGTGATAATTCTTACGGGGGAAAGAGGGATTTGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8318 AGAGATTACTTAAGACTGTGTCAGTCAACTAAAACATTCTAATATTTTTGTAAAACATTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1228 AGGAATTTATGCTTTGTCATGATGAACATGAGAAACTGTTTGACCTGGTTCGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1348 TTGACTTATTAAAAAAGAAATGAAATGGGAATCAGTGGTCTTACTATATACTTCTCTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1408 AGAGATTACTTAAGACTGTGTGAGTCAACTAAACATTCTAATATTTTTGTAAACATTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18378 TTATTTTGTACAGTTAAGTGTAAATATTGTATGTTTTGTATCAATAGCATAATTAACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18438 Traagcaagrafigercrigaraargcarragaaaarraaaarrraarrrrrrgaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAGCATCCTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 21234;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
46.6%; Score 1097; DB 4; Length 2
Best Local Similarity 100.0%; Pred. No. 4.4e-265;
Matches 1097; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                           AAACTTTTTGACTTCAG 2324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 21234
                                                                                                                                                                                                                                                                          RESULT 9
US-10-339-656-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-339-656-3
                                                     2188
                                                                                                                       2248
                   19038
                                                                                                                                                                                         2308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1468
                                                                                     19098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1588
```

a ò a ò g 8 6

ò g õ g ò ద us-10-801-671-1.rni

g

ઠે

g

ઠે

셤 ઠે 셤

ઠે

g

ે

ò

g

요

ð 셤

ઠે

셤

ò

g

ઠે

g

8 8 ò

ò

윱

ò 셤 ઠે g

셤

ठे

ò

```
GENERAL INFURIENTATION:
GENERAL INFURIENTATION:
APPLICANT: ULIRICH, Axel
APPLICANT: ULIRICH, Axel
APPLICANT: ULIRICH, Oliver
TITLE OF INVENTION: CLK PROTEIN KINASES AND RELATED PRODUCTS AND METHODS
FILE REFERENCE: 038602/0431
CURRENT APPLICATION NUMBER: US/09/905,999
CURRENT FILING DATE: 1999-07-31
PRIOR APPLICATION NUMBER: PCT/1897/00946
PRIOR PILING DATE: 1999-06-17
PRIOR PILING DATE: 1997-06-17
PRIOR APPLICATION NUMBER: US 08/877,150
PRIOR PILING DATE: 1997-06-17
PRIOR PRILING DATE: 1997-06-17
PRIOR PRILING DATE: 1997-06-17
PRIOR PELING DATE: 1997-06-17
PRIOR PELING DATE: 1996-12-19
NUMBER OF SEQ ID NOS: 26
SOFTWARE: PARENTIN Version 3.0
SEQ ID NO 22
TENNEW: 1239
    1993 ACAGACTGTATCAGTCTAATTTTTAAATTTTAAGTTATTTTGTACAGCTTTGTAAATTCT 2052
                                                                                                                                                    TACAGTTAAGTGTAAATATTGTATGTTTTGTATCAATAGCATAATTAACTTGTTAAGCAA 1535
                                                                                                                                                                                            TAACATTTTTATATTGCCATGTTTATTTTGGGTAATTTGGTTCATTAAGTACATAG 2112
                                                                                                                                                                                                                                     2113 CTAAGGTAATGAACATCTTTTTCAGTAATTGTAAAGTGATTTATTCAGAATAAATTTTT 2172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTACTGATCCCA 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCGAGAGAACAGCTTACCGAAGCCAGCGCAGCAGCGAAGGAAACACAGAAAGGCGGA 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 389 GGAGACGGAGCCGGACATTCAGCCGCTCATCTTCACACAGCAGCCG-----GAGAGCCA 442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAGTGGAGACGTTCTAAGAG 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      443 AGAGTGTAGAGGACGACGCTGAGGGCCACCTCATCTACCACGTCGGGGACTGGCTACAAG 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                394 CAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGTGCA 453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Agceararicaaarreraaccacerraceacaaageacrreecececeacrrerecagiste 562
                                                                   TAAGACTGTGTCAGTC--AACTAAACATTCTAATATTTTTGTAAACATTAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           214 ATCGAATCCACTGCAGTAAATCTTCAGTCCGCAGCAGAAGAAGCAGTCCTAAAAGGAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           274 GCAATAGACACTGTTCAAGTCATCAGTCACGTTCGAAGAGCCACCGAAGGAAAAGATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGATCATGCCATGCCATGCCATGCATGTAGCAGTGAAAATCGTAAAAATGTAGGCCGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1538;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 481.2; DB 4;
Pred. No. 7.9e-111;
0; Mismatches 398;
                                                                                                                                                                                                                                                                                                                      TTTTAAATACCTTTGAAATAT 1616
                                                                                                                                                                                                                                                                                                                                                                2173 Grgcrrárgaagirgárárgr 2193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; Sequence 22, Application US/09905999; Patent No. 6797513; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 64.6%;
Matches 736; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ) ORGANISM: Mus musculus
US-09-905-999-22
                            1943
                                                                   1418
                                                                                                                                                  1476
                                                                                                                                                                                            2053
                                                                                                                                                                                                                                        1536
                                                                                                                                                                                                                                                                                                                         1596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                 g
                            셤
                                                           ò
                                                                                              8 8
                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                       음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       े
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                              rcaraaagccccaccracarcraccacraaaaaaracraaaaarcrcaracaracrc 1102
                                                                                                                                                                                                                                                                                                                                                                  TACTITICGCTGTGTCCAGATGTTTGGAATGGTTTGAGCATCATGGTCACATTTGCATTGT 1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1357
                                                                                                                                 'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTTTGTCATGATGAAGAACATGAAAACTGTTTGACCTTCGAAGAATGTTAGAATA 1297
                                                                                                                                                                                                                AGATGAAATTGTTGATACTTTAGGTGAAGGAGCTTTTGGAAAAGTTGTGGAGTGCATCGA 1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTACACAGAGGCGTATAATCCCAAAATAAACGTGATGAACGCACCTTAATAAATCCAGA 1462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1463 TATTAAAGTTGTAGACTTTGGTAGTGCAACATATGATGACGAACATCACAGTACATTGGT 1522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1523 ATCTACAAGACATTATAGAGCACCTGAAGTTATTTTAGCCCTAGGGTGGTCCCAACCATG 1582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1058 GACTCATGATAGTAAGAGCACCTGGCAATGATGGAACGAATATTAGGACCCATACCACA 1117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACACATGATTCAGAAAACAAAAACGCAAGTATTTTCACCATAACCAGCTAGATTGGGA 1177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGTTGAAGGAATTTAT 1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1358 AAAAAAGAAATGAAATGGGAATCAGTGGTCTTACTATATACTTCTCTAGAAGAGATTACT 1417
                                                                                                                                                                                                                                                                                                                                                                                                                             637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTGCCAGTCAATAAATTTTTACA 757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGAACGCACACTGAAAAACACAGA 877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTTGAACTATTGGGACTTAGTACTTACGACTTCATTAAAGAAAATGGTTTTCTACCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTTTCTCAAGATGTTGAACATGAGCGTCTCTTTGACCTCATTCAGAAATGTTGGAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGAACACACACTCTGCCGGCAGATATGTTTCAAGACGCTGTAAACCTCTGAAGGAATTTAT
                                                                                                                                                                                                                                                         TCATGGCATGGATGGCATGCATGTAGCAGTGAAAATCGTAAAAATGTAGGCCGTTACCG
                                                                                                                                                                                                                                                                                                                                            TGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTTAAATAGTACTGATCCCAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                             TGTCTTCCGATGTCCAGATGCTAGAATGGTTTGATCATCATGGTCATGTTTGTATTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAAAGAAAACAGCTTTCTGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGATGAACATCACAGTACTTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTTGGTCTCAGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTTGGTTTCACAGTCTTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGGCAAAGTTGTAGAGTGCATTGA
                                                                                                                                 Gaps
                                                                                                                                 12;
                                                                                       Length 2254;
                                                                                     Score 640.6; DB 4; Length 2
Pred. No. 8e-151;
0; Mismatches 329; Indels
                            or other
                              ģ
                                                                                     Query Match 27.2%;
Best Local Similarity 72.1%;
Matches 880; Conservative
                        ú
                            ŭ
; LOCATION: 231, 241
; OTHER INFORMATION: a,
US-09-919-039-238
                                                                                                                                                                                                                                                                                                 1043
                                                                                                                                                                                                                                                                                                                                                                                    1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1298
                                                                                                                                                                                                                                                         458
                                                                                                                                                                                                                                                                                                                                            518
                                                                                                                                                                                                                                                                                                                                                                                                                           578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           998
```

```
PRIOR FILING DATE: 1996-12-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            977
                                                                                                                                                                                      Query Match
Best Local S
Matches 672
                                                                                                                                                                                                                                                                         317
                                                                                                                                                                                                                                                                                                                                                                                                                                          437
                                                                                                                                                                                                                                                                                                                 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        917
                                                                                                                                                                                                                                                                                                                                                        377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTACCTTGGTTTCACAGTCT 1053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              crrcrcggargarcagaaagacaagaaaacagaararrrrrarcgggrcgccrggarr 1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTGCAAACCGTTGAAGGAAT 1233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           checcereceserecies de la contra del la contra della contr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             recadadeceardacadadadadeareradecardardadadadadeereegereeree 1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  933
                                           633
                                                                                   742
                                                                                                                             693
                                                                                                                                                                    802
                                                                                                                                                                                                              753
                                                                                                                                                                                                                                                                                             813
                                                                                                                                                                                                                                                                                                                                       922
                                                                                                                                                                                                                                                                                                                                                                                873
                                                                                                                                                                                                                                                                                                                                                                                                                          982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RELATED PRODUCTS AND METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTATGCTTTGTCATGAAGAACATGAGAACTGTTTGACCTGGTTCGAAGAATGTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCAGCATCCTTTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGAACATCACAGTACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1283 GGGATGAGAACACCTCAGCCGGCCGCTACGTTCGTGAGAACTGCAAACCTCTGCGGCGT
                                                                                                                                                       CATTICAAATIGACCACATCAGGCAGAIGGCGTAICAGAICIGCCAGICAATAAATTITT
                                                                                                                                                                                                                                                     ccraccccarccaccaccaccacardeccrrrccaccrcrecadeccarcaagricc
                                                                                                                                                                                                                                                                                                                                         rccargaraacaagrrgacacaracgaccrcaaaccrcaaarararrcrgrrrgaarr
                                                                                                                                                                                                                                                                                                                                                                                CTGACTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGAACGCACACTGAAAAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGCTTTAGGTTGGTCTCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACGAATATTAGGACCCATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CACAACACATGATTCAGAAAACAAGAAAACGCAAGTATTTTCACCATAACCAGCTAGATT
  ACAAGGAAGCAGCCCGACTAGAAATCAACGTGCTGGAGAAAATCAATGAGAAAGATCCTG
                                                                               Achacaagaaccretigrerecagargririgaeriggririgaeraccarggedacargrigia
                                                                                                                               TIGIGITIGAACIACIGGGACITAGIACITACGAITICATIAAAGAAAACAGCITICIGC
                                                                                                                                                                                                                                                                                                 ATAGIGICTICCGAIGICCAGAIGCTAGAAIGGITIGAICAICAIGGICAIGITIGIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 24, Application US/09905999;
Sequence 24, Application US/09905999;
Patent No. 6797513;
GENERAL INFORMATION:
APPLICANT: ULLRICH.
APPLICANT: ULLRICH, Axel
PILE REPERENCE: 038602/0431;
CURRENT APPLICATION NUMBER: US/09/905,999;
CURRENT FILING DATE: 2001-07-17;
PRIOR PELICATION NUMBER: 09/127,248
PRIOR FILING DATE: 1999-07-31;
PRIOR APPLICATION NUMBER: 05/127,248
PRIOR FILING DATE: 1999-07-31;
PRIOR APPLICATION NUMBER: US 08/877,150;
PRIOR FILING DATE: 1997-06-17;
PRIOR FILING DATE: 1997-06-17;
PRIOR PELICATION NUMBER: US 08/877,150;
PRIOR PLING DATE: 1997-06-17;
PRIOR PELICATION NUMBER: US 08/877,150;
PRIOR PELICATION NUMBER: US 08/877,150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 12
US-09-905-999-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1043 '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1174
                                                                                                                                                                                                                                                        803
                                                                                                                                                                                                                                                                                                 754
                                                                                                                                                                                                                                                                                                                                           863
                                                                                                                                                                                                                                                                                                                                                                                                                            923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       934
                                                                                          683
                                                                                                                               634
                                                                                                                                                                         743
                                                                                                                                                                                                                694
                                                                                                                                                                                                                                                                                                                                                                                     814
                                           574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                               g
                                                                                                                                                         ል ጵ
                                                                                                                                                                                                                                               8 6 8
                                                                                                                                                                                                                                                                                                                                                                        8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
      유
                                       ठे
                                                                                                                          ò
```

```
1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAGTCAGTGAAGAACACCAGCATCCGAGTGGCAGACTTTGGCAGTGCCACGTTTGACCA 1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTTGGTTTCACAGTCTTTCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACG 1096
                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          986
                                                                                                                                                                                                                376
                                                                                                                                                                                                                                                                                     436
                                                                                                                                                                                                                                                                                                                       566
                                                                                                                                                                                                                                                                                                                                                          496
                                                                                                                                                                                                                                                                                                                                                                                            626
                                                                                                                                                                                                                                                                                                                                                                                                                                556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1167 CCGTGGCTTTACACTCTTCCAGACCCATGAAAATAGAGAACACTTGGTTATGATGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 927 CATCTTGTTGTGAATTCTGAGTTTGAAACCCTCTACAATGAGGACACAAGAGCTGCGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGAACATCACAGTACTTTGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITAGGITGGICTCAGCCTTGTGATGTTTGGAGCATAGGTTGCATTCTTATTGAATATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1097 AATATTAGGACCCATACCACACACATGATTCAGAAAACAAGAAAACGCAAGTATTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCATAACCAGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAAAACAGCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAGAACAACTICCAGCCITACCCCCTACCACATGTCCGGCACATGGCCTACCAGCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAGTCAATAAATTTTTACATCATAATAAATTAACCCCATACAGATCTGAAGCCTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 857 ACGCACACTGAAAAACACACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGA
                                                                                                                                                                                                                                                                                                                                                                                 687 CAAGGAGAAAAGACAAGGAAAATAAGTTCCTTTGTGTCCTGATGTCTGACTGGTTCAACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCAIGGICAIGITIGIATIGIATITGAACIACGGACITAGTACITACGAITICAITAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              747 ccargercarargrecarcecrireaecrecresecaagaacaccrrrsagriccreaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATTTTGTTTGTGAAGTCTGACTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGA
                                                                                                                                                                                                              CCGAAGGAAAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAG
                                                                                                                                                                                                                                  AAAAAATGTAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ccgraarcreeccaagrarcessaaccecrecressaarraarcreeasaaar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAATAGTACTGATCCCAATAGTGTCTTCCGATGTCCCAGATGCTAGAATGGTTTGATCA
                                                                                                                                                                                                                                                                                     TGGAGACGTTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGG
                                                                                                                                                                              Gaps
                                                                                                                                                                              ö
                                                                                                                                        Length 1787;
                                                                                                                                                                              Indels
                                                                                                                                          Score 454.8; DB 4;
Pred. No. 3.7e-104;
0; Mismatches 362;
NUMBER OF SEQ ID NOS: 26
SOFTWARE: Patentin version 3.0
SEQ ID NO 24
LENGTH: 1787
                                                                                                                                              19.3%;
65.0%;
                                                                                                                                                                                  Conservative
                                                                                         musculus
                                                                                                                                                             Similarity
                                                                       ; TYPE: DNA
; ORGANISM: Mus
US-09-905-999-24
                                                                                                                                                                              672;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

ઠે

```
Sequence 2648, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1160 ccegescricacacrerrecasacceaccaaaaacceasascacciestsarsarsasaaa 1219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     980 GAAGTCAGTGAAGAACACCAGCATCCGAGTGGCTGACTTTGGCCAGTGCCACATTTGACCA 1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .040 reascaccaccaccarreresceacececercarraresceacececeraassrearecrass
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1100 ceresecresecacadecerereacereresecarreserisecrisearreserreacracra 1159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1037 CCTTGGTTTCACAGTCTTTCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACG 1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCATAACCAGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTG 1216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  caaacececcracrircecarcacaccecrcrcaccecccccrarcraaccacaaacrc 1339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAACCGTTGAAGGAATTTATGCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCT 1276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1277 GGTTCGAAGAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCA 1336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    979
                                                                                                                                                             616
                                                                                                                                                                                                                                                                                                                                                                                                          796
                                                                                                                                                                                                                                                                                                                                                                                                                                                 919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            856
                                                                                                                     620 ccgcaaccicescaagiaccesascicccccccaaaaaicaacciccaaaaaai 679
                                                                                                                                                                                                      680 CAAGGAGAAGGACAAAGAAAACAAGTTCCTGTGTGTCTTGATGTCTGACTGGTTCAACTT 739
                                                                                                                                                                                                                                          617 TCATGGTCATGTTTTGTGTTTTGAACTACTGGGACTTAGTACTTACGATTTTCATTAA 676
                                                                                                                                                                                                                                                                                   799
                                                                                                                                                                                                                                                                                                                                                                  859
                                                                                                                                                                                                                                                                                                                           677 AGAAAACAGCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTG 736
                                                                                                                                                                                                                                                                                                                                                                                                                                    560 CAAGGTGGTGGTGCTTGGACCATGCCAGAGGGAAGTCTCAGGTTGCCCTGAAGATCAT
                                                                                                                                                                                                                                                                                   740 ccacedroacarerecarerecerritgaecrecreesecaagaecrerreagricereaa
                                                                                                                                                                                                                                                                                                                                                                                                          CCAGTCAATAAATTTTTACATCATAATAAATTAACCCATACAGATCTGAAGCCTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            797 TATTTTGTTTGTGAAGTCTGACTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            920 CATCCTGTTTGTGAATTCTGAGTTTGAAACCCTCTACAATGAGCACAAGAGCTGTGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             857 ACGCACACTGAAAAACACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGAACATCACAGTACTTTGGTGTCTACCCGGCACTACAGAGCTCCCGAGGTCATTTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1097 AATATTAGGACCCATACCACACACACATTCAGAAAACAAGAAAACGCAAGTATTTTCA
                                                                                                                                                             AAATAGTACTGATCCCAATAGTGTCTTCCGATGTCTCCAGATGCTAGAATGGTTTGATCA
                                                                                                                                                                                                                                                                                                                                                                800 geagaaraacriccagccriaccccraccacargccgcacarggccraccagcrcrg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1340 caaactrofeaagagriacatacecaagacrocorggagcacgrgcagcrgriffill
  497 AAAAATGTAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1400 GATGAGGAGGATGTTAGAATTTGACCCTGCCCAGCGCATCACACTGGCCGAGGCCCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCATCCTTTCTTTG 1350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCACCCCTTCTTTG 1473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 14
US-09-949-016-2648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1217
437
                                                                                                                                                             557
                                                                                                                                                                                                                                                                                                                                                                                                          737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1460
                                                                                 ò
                                                                                                          셤
                                                                                                                                                             ò
                                                                                                                                                                                                  g
                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                              CCGAAGGAAAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAG 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      500 CGGCGATTGGCTCCAAGAGCGATATGAGATTGTGGGGAACCTGGGTGAAGGCACCTTTGG 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGTAAGCGCACAGGCCGGAGTGTGGAAGATGACAAGGAGGGTCACCTGGTGTGCCGGAT 499
CAAACCGTTGAAGGAATTTATGCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCT
                                      caaaccrcrigaagarracargcrigcaggacrcccrggaggargrigaggrirrgaccr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGAGACGTTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Janica Au-Young
APPLICANT: Janica Au-Young
APPLICANT: Janica Au-Young
TITLE OF INVENTION: POMPOSITION FOR THE DETECTION OF SIGNALING
TITLE OF INVENTION: POMPOSITION: POMPOSITION FOR THE DETECTION OF SIGNALING
TITLE OF INVENTION: POMPOSITION FOR THE DETECTION OF SIGNALING
CORRESPONDENCE ADDRESS:
ADDRESSEE: 1490
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 1762;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 432.4; DB 4; Length
Pred. No. 1.6e-98;
0; Mismatches 376; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/016,434
FILING DATE: HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PA-0002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFRENCE/DOCKET NUMBER: PA-0
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: (650) 855-0555
TELEFAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 1439:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18.4%;
                                                                                                                                                             GCATCCTTTCTTTG 1350
                                                                                                                                                                                   LENGTH: 1762 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 63.6'
Matches 658; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; LIBRARY: GENBANK
; CLONE: 9632971
US-09-016-434-1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                   -09-016-434-1439
                                      1347
                                                                                                                     1407
                                                                                                                                                             1337
                                                                                                                                                                                                    1467
1217
                                                                              1277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                377
                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                  g
                                                                                                                                                           ઠે
                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                            ò
```

```
Sequence 2649, Application US/09949016

Patent No. 681239
GENERAL INPORMATION:
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-10-03
PRIOR PRIOR FILING DATE: 2000-10-09
PRIOR FILING DATE: 2000-10-09
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                             1276
                                                                                  1220 GATCCTAGGGCCCATCCCATCACACATGATCCACCGTACCAGGAAGCAGAATATTTCTA 1279
                                                                                                                                                                                             1340 CAAACCTCTGAAGATTACATGCTCCAAGACTCCCTGGAGCACGTGCAGCTGTTTGACCT 1399
                                                                                                                                                                                                                                                                                                                                                                                                                         GGTTCGAAGAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCA 1336
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                799
                        1097 AATATTAGGACCCATACCACACACATGATTCAGAAAACAAGAAAACGCAAGTATTTCA
                                                                                                                                                       CCATAACCAGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTG
                                                                                                                                                                                                                                                                                      1217 CAAACCGTTGAAGGAATTTATGCTTTGTCATGATGAAGAACATGAGAAACTGTTTGACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   740 CCACGGTCACATGTGCATCGCCTTTGAGCTCCTGGGCAAGAACACCTTTGAGTTCCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   317 CCGAAGGAAAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                500 CGGCGATTGGCTCCAAGAGCGATATGAGATTGTGGGGAACCTGGGTGAAGGCACCTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                557 AAATAGTACTGATCCCAATAGTGTCTTCCGATGTCCCAGATGCTAGAATGGTTTGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               617 TCATGGTCATGTTTGTATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTACATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  377 TGGAGACGTTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAAGITGTAGAGTGCATTGATCATGGCATGGCATGCATGTAGCAGTGAAAATCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   197 AAAAATGTAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  620 CCGCAACGTGGGCAAGTACCGGGAGGCTGCCCGGCTAGAAATCAACGTGCTCAAAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              580 CAAGGAGAAGACAAAGAAACAAGTICCTGTGTGTCTTGATGTCTGACTGGTTCAACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1763;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tch 18.3%; Score 430.8; DB 4; al Similarity 63.5%; Pred. No. 3.9e-98; 657; Conservative 0; Mismatches 377;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCATCCTTTTG 1350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1460 GCACCCTTCTTTG 1473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: DNA
; ORGANISM: Human
US-09-949-016-2649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-949-016-2649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Si
Matches 657;
                                                                                                                                                       1157
                                                                                                                                                                                                                                                                                                                                                                                                                         1277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     437 (
                                                                    g
                                                                                                                                                   ò
                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      980 GAAGTCAGTGAACAACACCAGCATCCGAGTGGCTGACTTTGGCAGTGCCACATTTGACCA 1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .100 GCTGGGCTGGGCACACCCTGTGACGTCTGGAGCATTGGCTGCATTCTCTTTGAGTACTA 1159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTTGGTTTCACAGTCTTTCAGACTCATGATAGTAAAGAGCACCTGGCAATGATGGAACG 1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            317 CCGAAGGAAAAGATCCAGGAGTATAGAGGATGATGAGGAGGGTCACCTGATCTGTCAAAG 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          440 cadraagcgcagcagccggagrgrggaagargacaaggaggrcaccrggrgrgccggar 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAAAGTTGTAGAGTGCATTGATCATGGCATGGATGGCATGTAGCAGGAGAGAAAATCGT 496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           620 ccgchacergedechaeracegegegegecegegerachaharearcerecreahahar 679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         740 ccacécticacateriscatecertricaciectecisescaacacacertricaciteria 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGAAAACAGCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTG 736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               500 CGGCGATTGGCTCCAAGAGCGATATGAGATTGTGGGGAACCTGGGTGAAGGCACCTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGAGACGTTCTAAGAGCAAGATATGAAATCGTGGACACTTTGGGTGAAGGAGCCTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            560 chaggirgirgiciriga chiga chaga chaga a chaga indecenda a chaga indecenda a chaga indexenta a chaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         557 AAATAGTACTGATCCCAATAGTGTCTTCCGATGTCTCCAGATGCTAGAATGGTTTGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  800 GGAGAATAACTTCCAGCCTTACCCCTACCACATGTCCGGCACATGGCCTACCAGCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       920 carccristricricaarrcrisastricaaacccrcracaarcacacaasascristicaasa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        857 ACGCACACTGAAAAACACAGATATCAAAGTTGTTGACTTTGGAAGTGCAACGTATGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         497 AAAAATGTAGGCCGTTACCGTGAAGCAGCTCGTTCAGAAATCCAAGTATTAGAGCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        617 TCATGGTCATGTTTGTATTGTGTTTGAACTACTGGGACTTAGTACTTACGATTTCATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAGTCAATAAATTTTTTACATCATAATAAATTAACCCATACAGATCTGAAGCCTGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   797 TATTITGITIGIGAAGICIGACTAIGIAGICAAAIATAATICIAAAAIGAAACGIGAIGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           917 TGAACATCACAGTACTTTGGTGTGTTCTACCGGCACTACAGAGCTCCCGAGGTCATTTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .040 reagcaccaccaccarrerescencececececececececes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       977 TITAGGITGGICTCAGCCTIGIGAIGITIGGAGCAIAGGITGCAITCTIAITGAATAITA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1763;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 430.8; DB 4; Length Pred. No. 3.9e-98; O; Mismatches 377; Indels
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR FILING DATE: 2000-10-03
PRIOR FILING DATE: 2000-09
PRIOR FILING DATE: 2000-09
PRIOR FILING DATE: 2000-09
SPRIOR FILING DATE: 2000-09
SPRIOR FILING DATE: 2000-09
SOFTWARE: FABLSEQ for Windows Version 4.0
SEQ ID NO 2448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 63.5
Matches 657; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JS-09-949-016-2648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              437
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          737
```

a a

ò

g

ð

ò 유 ò 요

셤

ò

g

ð g ò 임 ò g ò g ò a ò g ò 셤

ò

```
977 TTTAGGTTGGTCTCAGCCTTGGAGTTTTGGAGCATAGGTTGCATTCTTATTGAATATTA 1036
1100 GCTGGGCTGGGCACAGCCCTGTGACGTCTGGAGCATTGGCTGCATTCTTTTGAGTACTA 1159
                                                                                                                                                                                                                                  CCTTGGTTTCACAGTCTTTCAGACTCATGATAAGAAGAGCACCTGGCAATGATGGAACG 1096
                                                                                                                                                                                                                                                                                   1220 GATCCTAGGGCCCATCCCATCACACAGATGATCCACCGTACCAGGAAGCAGAAATATTTCTA 1279
                                                                                                                                                                                                                                                                                                                           1097 AATATTAGGACCCATACCACACATGATTCAGAAAACAGAAAAACGCAAGTATTTCA 1156
                                                                                                                                                                                                                                                                                                                CCATAACCAGCTAGATTGGGATGAACACAGTTCTGCTGGTAGATATGTTAGGAGACGCTG 1216
                                                                                                                                                                                                                                                                                                                                                      CAAACCGTTGAAGGAATTTATGCTTTGTCATGAAGAACATGAGAAACTGTTTGACCT 1276
                                                                                                                                                                                                                                                                                                                                                                 1277 GGTTCGAAGAATGTTAGAATATGATCCAACTCAAAGAATTACCTTGGATGAAGCATTGCA 1336
          800 GGAGAATAACTICCAGCCTIACCCCTACCACATGTCCGGCACATGGCCTACCAGCTCTG 859
                                                CATCCTGTTTGTGAATTCTGAGTTTGAAGCCTCTACAATGAGGACAAGAGCTGTGAGGA 979
                                      CCAGTCAATAAATTTTTACATCATAAATTAACCCATACAGATCTGAAGCCTGAAAA 796
                                                                            797 TATTITICITICICAAGTCTGACTATGTAGTCAAATATAATTCTAAAATGAAACGTGATGA 856
 AGAAAACAGCTTTCTGCCATTTCAAATTGACCACATCAGGCAGATGGCGTATCAGATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                   GCATCCTTTCTTTG 1350
                                                                                                                                                                                                                                                                                                                                                                                                                                              1280
                                                                                                                                                                                                                                    1037
                                                                                                                                                                                                                                                      1160
                                                                                                                                                                                                                                                                                                                 1157
                                                                                                                                                                                                                                                                                                                                                       1217
                                                                                                                                                                                                                                                                                                                                                                          1340
                                                                                                                                                                                                                                                                                                                                                                                                               1400
                                                                                                                                                                                                                                                                                                                                                                                                                                    1337
                                     737
                                                         860
8 8
```

Search completed: August 3, 2005, 19:44:04 Job time : 398.802 secs

THIS PAGE BLANK (USPTO)